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# **Special Border Economic Zone (SBEZ) in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT)**

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15 May 2014

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# **Special Border Economic Zone (SBEZ) in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT)**

Prepared by

**Montague Lord  
and  
Pawat Tangtrongita**

**15 May 2014**

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# Scoping Study for the Special Border Economic Zone (SBEZ) in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT): Final Report

## Executive Summary

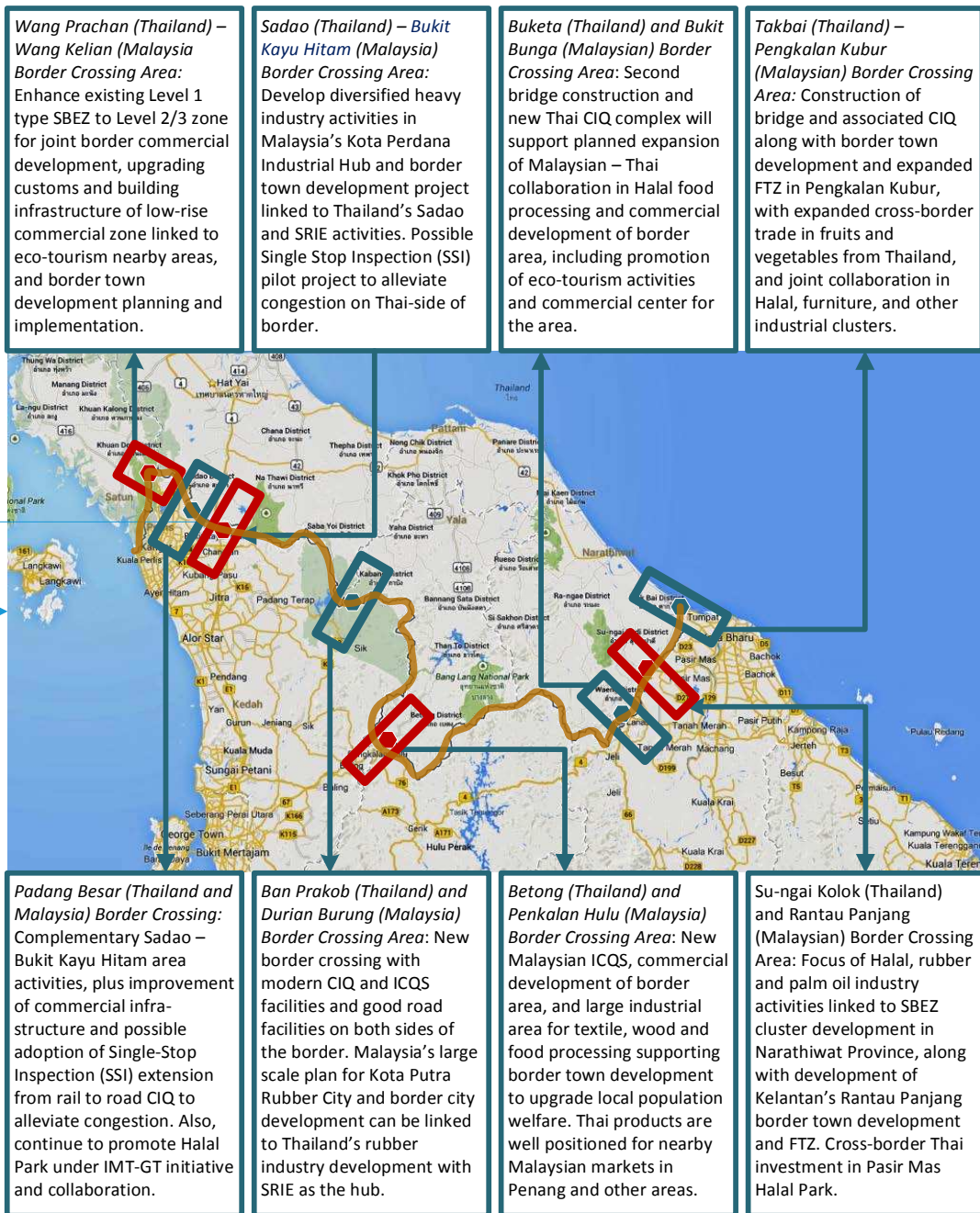
**Report Objective:** This report provides a review and analysis of the findings from the scoping study on the proposed Malaysian–Thailand Special Border Economic Zone (SBEZ). The coverage of the study is guided by the recommendations of the IMT-GT Special Implementation Task Force on the Establishment of a Special Border Economic Zone (hereafter TF-SBEZ) at its meeting in Penang, Malaysia on 22 November 2013. At that time, the TF-SBEZ determined that that present study should be a stand-alone study, comprehensive in nature and cover in-depth all the SBEZ components for each of the eight border crossing areas in the Thai-Malaysian border, including linkages to Indonesia. Based on those findings, the TF-SBEZ requested that the present study make recommendations to the Task Force on the possible location(s) of the SBEZ. The study is part of a broader project that intends to support the establishment of an SBEZ that will help to attract investors in productive activities that promote subregional value chains in order to stimulate cross-border trade and investment, serve as a catalyst to commerce along the IMT-GT corridors and help to substantially improve the social and economic welfare of the population along the border provinces.

**Implementation:** The present consultancy has been carried out between 10 February 2014 and 15 May 2014 under technical assistance provided by the Asian Development Bank. The first field visit of the study team to the Thai side of the border took place on 2-7 March 2014. That fieldwork was preceded by a visit to the border area on the part of the National Economic and Social Development Board (NESDB) on 16-24 February 2014 that included two consultant associates from the present team. The second field visit of the study team covered the Malaysian side of the border and took place between 29 March and 4 April 2014.

**SBEZ Components and Roadmap:** Each border crossing has been assessed on the basis of the following components, details of which are presented in the main body of this report: (a) special economic zone (SEZ) potential; (b) cross-border value chains; (c) transport and logistics; (d) socio-economic development strategy for the area; (e) SME development and business development services; (f) linkages to Indonesia. The proposed SBEZ is best viewed as incremental levels of collaborative of Malaysia, Thailand and Indonesia. Level 1 would cover the establishment of SBEZ facilities and supporting activities on either or both sides of the border; Level 2 would involve development of cross-border value chains and hard and soft infrastructure supporting the SBEZ; and Level 3 would consist of collaboration in joint SBEZ facilities and supporting activities. This stepwise approach reflects international best practices for the development of cross-border SEZs in Europe, North America and Asia. It ensures that actions on either side of the border move from an informal to formal mechanisms of collaboration, thereby providing an effective mechanisms for achieving long-term goals for the operation of a joint SBEZ.

**Opportunities at Each Border Crossing Area:** There are considerable differences among the bordering Thai provinces and Malaysian states in terms of geography, demographics, development levels, comparative advantages of industries, infrastructure, and potential sector- or industry-level collaboration. Figure S1 summarizes possible areas of collaboration at each border

**Figure S1: Summary Opportunities at Thai-Malaysian Border Crossing Areas**



crossing and it reflects the detailed analysis of Part III in this report, where ratings are presented for each of the eight border crossings.

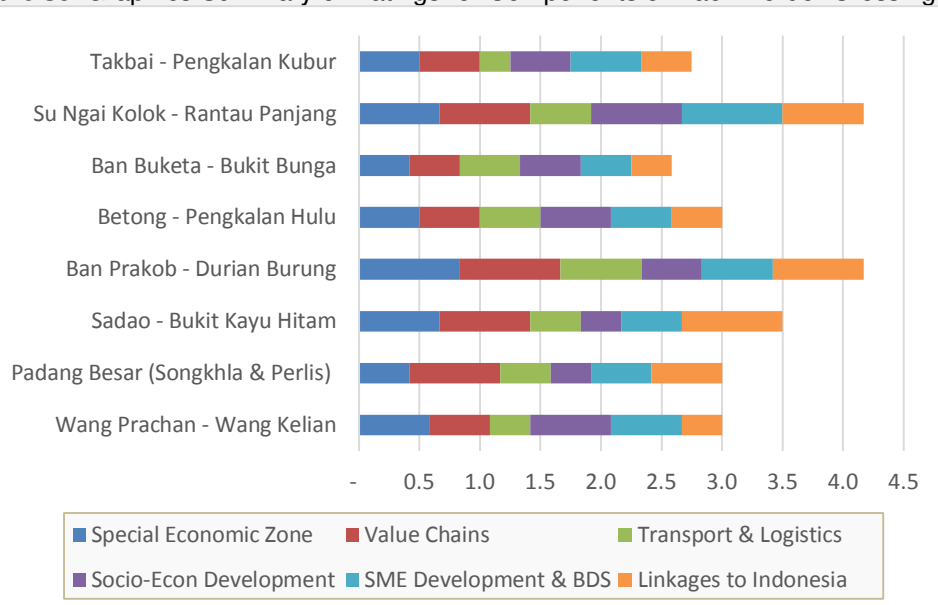
**Ratings:** The ratings of the assessment are summarized visually in Figures S2 and S3. The results show that there are two border crossing areas with the highest ratings: The first is the Su-ngai Kolok – Rantau Panjang in Narathiwat Province of Thailand; the second is the Ban Prakob – Durian Burung border crossing area in Kedah State of Malaysia and Songkhla Province of Thailand. However, they reflect considerable differences in the valuation of parameters for each of the components. Ban Prakob – Durian Burung border crossing has new modern customs facility

**Figure S2:** Table Summary of Ratings for Components of Each Border Crossing Area

	Wang Prachan - Wang Kelian	Padang Besar (Songkhla & Perlis)	Sadao - Bukit Kayu Hitam	Ban Prakob - Durian Burung	Betong - Pengkalan Hulu	Ban Buketa - Bukit Bunga	Su Ngai Kolok - Rantau Panjang	Takbai - Pengkalan Kubur
<i>Special Economic Zone</i>	3.5	2.5	4.0	5.0	3.0	2.5	4.0	3.0
<i>Value Chains</i>	3.0	4.5	4.5	5.0	3.0	2.5	4.5	3.0
<i>Transport &amp; Logistics</i>	2.0	2.5	2.5	4.0	3.0	3.0	3.0	1.5
<i>Socio-Econ Development</i>	4.0	2.0	2.0	3.0	3.5	3.0	4.5	3.0
<i>SME Development &amp; BDS</i>	3.5	3.0	3.0	3.5	3.0	2.5	5.0	3.5
<i>Linkages to Indonesia</i>	2.0	3.5	5.0	4.5	2.5	2.0	4.0	2.5
<b>Mean Average</b>	<b>3.0</b>	<b>3.0</b>	<b>3.5</b>	<b>4.2</b>	<b>3.0</b>	<b>2.6</b>	<b>4.2</b>	<b>2.8</b>

on both sides, a four lane highway that is currently being completed on the Thai side, and an excellent roadways on the Malaysian side of the border. The area around the border on the Thai side has been designated for farmland and natural preserves, and there could therefore be sensitivity on the part of the local population to the establishment of an SEZ in the border area. Development of part of the SBEZ could, however, be located farther inland, which might eliminate those possible drawbacks.

The Su-ngai Kolok – Rantau Panjang border crossing area already has a designated SBEZ site on the Thai side that is acceptable to the local population, and there is a modern customs facility at the border with good roadway access. On the Malaysian side, there is widespread interest in

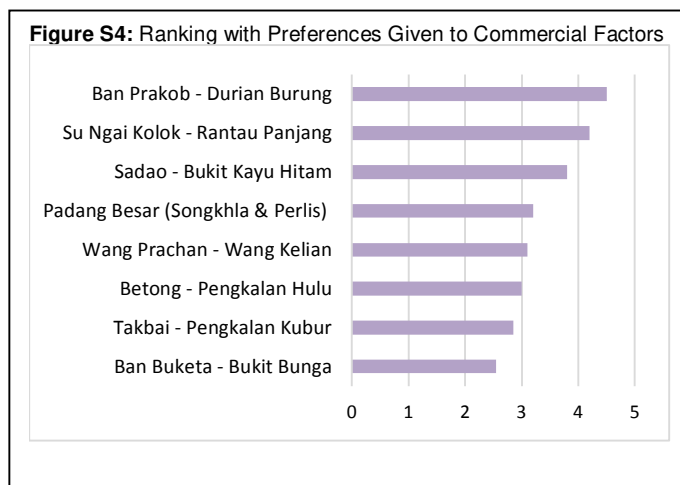
**Figure S3:** Graphics Summary of Ratings for Components of Each Border Crossing Area

collaborating with Thailand in the Halal industry along with the furniture and wood processing industries, tourism and agriculture and agro-processing. Moreover, per capita GPP of Narathiwat Province is only half of that in Songkhla Province, and the GDP of Kelantan State is nearly half of that in Perak State. Since an SBEZ is largely motivated by socio-economic development concerns rather than purely commercial interests, there is good reason to establish an SBEZ in this area. However, Narathiwat continues to have security concerns that could create a disincentive for businesses to locate in the area, and implementation of an SBEZ would require concerted actions to ensure security in the area.

The Sadao – Bukit Kayu Hitam border area in Songkhla Province of Thailand and Kedah State of Malaysia has the next highest ratings. There is a great deal of commercial activity in these areas and, for Thailand, the volume of cross-border trade is the higher than that of any other border in the country. On the Malaysian side, there is large scale development underway of a broad-based industrial park, border town development, support industries and a new ICQS complex. On the Thai side, however, the area is highly congested and the population has the highest GPP in the southern border provinces. These differences, as well as those in the other locations, need to be weighed when determining the viability of establishing an SBEZ that will effectively address the needs and interests of the project stakeholders.

There are two other border crossings that should be considered for their SBEZ viability. The first is the Wang Prachan - Wang Kelian border crossing in Satun Province of Thailand and Perlis State of Malaysia. Both the Thai province and the Malaysian province have low per capital incomes that would greatly benefit from the project. Moreover, the border crossing has already progressed to the second stage of an SBEZ where a common border area is informally managed by the countries on each side of the border. There is also a strong motivation for promoting an SBEZ in this area because of its focus on eco-tourism and the integration of commercial activities in a style that would have low environmental impact and be designed in a way that is integrated into its environment and maintains the local cultural heritage. The second border crossing is that of Betong – Pengkalan Hulu in Yala Province of Thailand and Perak State of Malaysia. A similar approach is being followed to that of Wang Prachan – Wang Kelian in terms of commercial development within an attractive eco-tourism environment and proximity to Penang.

**Commercial versus Welfare Preference Ratings:** The aforementioned results of the border crossings ranking are based on a simple average of the SBEZ components that underlie the analysis. Alternative results are also presented for three sets of results based on a preference



ordering. Figure A4 shows the ranking that occurs when the potential for developing SEZs and value chains in the border area are given preference over other components. In this case, Ban Prakob – Durian Burung border area has a clear advantage over Su Ngai Kolok - Rantau Panjang. Also, Padang Besar has a somewhat higher rating than Wang Prachan – Wang Kelian and Betong – Pengkalan Kubur. In contrast, when socio-economic and SME development factors are given preference over purely commercial interests, then Figure S5 shows that the Su Ngai Kolok - Rantau

Panjang has a clear advantage over the Ban Prakob – Durian Burung border area. Also, Wang Prachan - Wang Kelian moves up two position to become the third highest rated border crossing area.

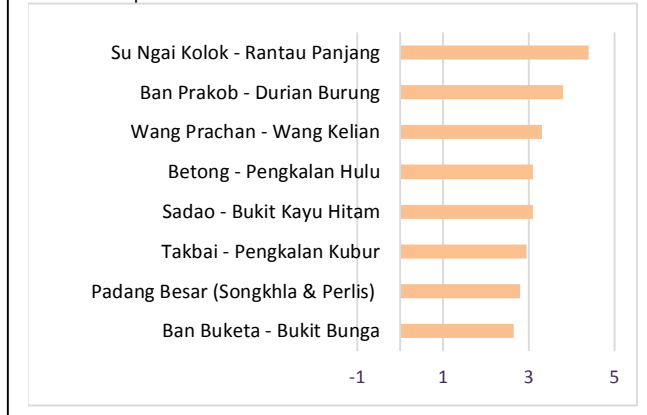
**Single versus Integrated SBEZs:** In the case of the Thai-Malaysian border area, best international practices suggest an all-inclusive approach to the development of the targeted border area, taking into account interconnected cluster developments in a subregion. Indeed, an optimal approach would be to develop each area along the border within the context of its contribution to other border crossing areas.

This approach would give rise to a comprehensive networking approach to border development so that economies of scale are derived from complementary cross-border activities and interconnectivity of border crossing activities. In practice, however, technical and financial limitations may prevent the adoption of a comprehensive approach. Technically, the lack of a clear understanding on the part of local and sub-regional government agencies and private sector groups would suggest the need for a pilot SBEZ project along one border crossing areas, which in and of itself requires considerably networking of activities within the sub-region and with linkages to the Indonesian sub-region covered by the IMT-GT. Such an approach could produce practical benefits otherwise not available in an all-inclusive approach. But it would, by its inherently limited approach, be unable to achieve the full benefits of scale economies that could otherwise be derived from a comprehensive approach to border development.

**Next Steps:** Specific recommendations for the scope and coverage of the Comprehensive SBEZ Study must await the decision of the TF-SBEZ on the possible location(s) of the SBEZ. Once the spatial location(s) of the SBEZ is determined, the IMT-GT Special Border Economic Zones Special Implementation Task Force (TF-SBEZ) may next wish to address the specific components that will need to be covered for the design and implementation of the SBEZ site itself and the strategic development for the area. Those components will probably need to encompass three dimensions: (a) hard and soft infrastructure inside the site; (b) connectivity infrastructure to subregional markets and international gateways; and (c) local socio-economic development plans. Site infrastructure requirements will depend on the proposed cross-border collaboration in sectors or industries and the types of targeted investments for the SBEZ, while connectivity is largely associated with transport infrastructure, trade facilitation and logistics services along the IMT-GT corridors. In connection with trade facilitation, the TF-SBEZ may wish to consider the inclusion of pilot projects along the border of the type being implemented under the GMS Cross-Border Trade Agreement (CBTA) that would address existing delays in some of the Thai-Malaysian border crossing due to large transportation volumes and the lack of integrated customs and immigration information, along with separate inspection facilities. A Single-Stop Inspection (SSI) mechanisms could be piloted in the selected location(s) of the SBEZ along the Thai-Malaysian border in order to allow border control authorities from the two countries to jointly conduct one-stop inspections in the same facility. This approach would be covered under the Level 3 stage of the SBEZ roadmap.

Possibly the most challenging dimension of the SBEZ is that of the socio-economic development for the area. Left to itself as a by-product of the growth of company operations in the site, trickle down effects of investments in the SBEZ are unlikely to produce sufficient advancements in

**Figure S5:** Ranking based on Welfare Improving Preferences of SBEZ Components



training and education for workers, improvements in gender equality, and SME business development opportunities. Companies are often hesitant to invest in skills training programs because they fear that workers will be drawn away by competing enterprises after being trained. And SME often lack the capital and know-how to develop business opportunities that will allow them to operate within a zone or provide support services to large enterprises in the zone. At issue is how to consolidate the wide range of social and economic objectives for the border area into a few programs that are able to address all SBEZ objectives. In this regard and before making a final determination as to the location(s) of the SBEZ, the TF-SBEZ may wish to carry out a sensitivity analysis based on a perception survey of the local population along the border about their attitudes of an SBEZ in their area.

## **PART I. INTRODUCTION**



## **I. BACKGROUND AND COVERAGE**

### **A. Study Objective**

This report provides a review and analysis of the findings from the scoping study on the proposed Malaysian–Thailand Special Border Economic Zone (SBEZ). The study supports the establishment of an SBEZ that will help to attract investors in productive activities and, in turn, will promote subregional value chains that stimulate cross-border trade and investment, serve as a catalyst to commerce along the IMT-GT corridors and help to substantially improve the social and economic welfare of the population along the border areas.

The coverage of the study is guided by the concluding recommendations of the IMT-GT Special Implementation Task Force on the Establishment of a Special Border Economic Zone (hereafter TF-SBEZ) at its meeting in Penang, Malaysia on 22 November 2013.<sup>1</sup> At that time, the TF-SBEZ determined that that present study would be a stand-alone study, comprehensive in nature and cover in-depth all the SBEZ components for each of the eight border crossing areas in the Thai-Malaysian border. It further stated that, based on the results of that analysis, the Scoping Study would recommend to the Task Force the location for the SBEZ. Furthermore, the Task Force indicated the need for the present study to examine linkages to Indonesia along with the broader ASEAN Economic Community (AEC).

As such, the following timeline of activities has been established for the possible implementation of an SBEZ on the Thai-Malaysian border:

1. Scoping study on eight border crossings as a stand-alone study that covers the SBEZ components and includes possible linkages to Indonesia and the wider AEC (10 February – 22 April 2014).
2. Recommendations submitted to the IMT-GT Special Implementation Task Force on the Establishment of a Special Border Economic Zone and determination by the Task Force on where the SBEZ is to be located (23-25 April 2014).
3. The decisions adopted by the TF-SBEZ will be submitted to the 8<sup>th</sup> IMT-GT Summit in May 2014.
4. If the TF-SBEZ determines that an SBEZ should be implemented and decides on its location(s), then a comprehensive SBEZ study will undertake on an all-inclusive analysis of components that form part of a result-oriented action plan to implement the joint IMT-GT SBEZ along the Thai-Malaysian border (start-up date to be determined).

This study forms part of a project funded by the Asian Development Bank's (ADB) technical assistance project 'Institutional Development for Enhanced Subregional Cooperation in the aSEA Region' to support strengthened regional cooperation in the aSEA region (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore) in order to accelerate the implementation of the existing roadmaps through capacity development (ADB, 2013).

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<sup>1</sup> For details on the minutes of the meeting and decisions adopted by the Task Force, see Lord and Pawat (2013b).



## **B. Background**

The present SBEZ study has its origins in the Joint Development Strategy Working Group (JDS WG), a bilateral initiative between the governments of Malaysia and Thailand to promote sustainable and inclusive development along their common border. Individual studies for a SBEZ at the border region of Sadao in Thailand and Bukit Kayu Hitam in Malaysia were completed by end-2009, and a special task force was established to compile and integrate these different studies. The ensuing JDS Project Coordinators task force recommended that a joint feasibility study for an SBEZ at Sadao-Bukit Kayu Hitam be undertaken.

At the 7<sup>th</sup> IMT-GT Summit in Brunei Darussalam on 25 April 2013, the Leaders identified the proposed SBEZ as a Signature Project. The proposal was further discussed at the IMT-GT Ministerial Meeting in Ko Samui on 13 September 2013. There, Ministers recommended that the Comprehensive SBEZ Study also include Indonesia through IMT-GT's existing transport and economic corridors. As the regional development adviser, ADB was requested to help conduct an initial scoping study for the Malaysian-Thailand SBEZ, exploring possible linkages between Malaysia, Thailand and Indonesia. ADB's involvement was requested because the individual studies did not adequately capture elements for an SBEZ that encompasses Malaysia, Thailand and Indonesia. More specifically, the individual studies did not fully address: (i) cross-border physical connectivity constraints and opportunities; and (ii) how to reconcile differences in governing policies.

The first meeting of the TF-SBEZ took place at the IMT-GT 4<sup>th</sup> Chief Ministers and Governors' Forum (CMGF) Retreat in Penang, Malaysia, on 21-23 November 2013. The Task Force addressed the coverage, methodology and timetable for the preparation of the scoping study and it issued three important decisions: first, as mentioned above, it determined that the scoping study would be a stand-alone study, comprehensive in nature and covering in depth all the SBEZ components for each of the eight border crossing areas in the Thai-Malaysian border. Based on the results of that analysis, the scoping study would recommend to the Task Force the location(s) for the SBEZ. Second, the scoping study should take into account possible negative perceptions on the part of the local population about locating an SBEZ in their community. While recognizing that such an analysis is outside the sphere of the scoping study, the task force nevertheless asked that the consultants strive to incorporate considerations about local acceptance of the SBEZ in the area recommended by the study. Third, linkages to Indonesia and the broader ASEAN Economic Community should emerge as a consequence of the analysis along the border, specifically, the SBEZ's location, magnitude of intervention projects, industries to be targeted and connectivity to corridors.

## **C. Activities Carried Out under the Consultancy**

On 21 November 2013, a Pre-Inception Report was prepared and delivered to the members of the IMT-GT Special Border Economic Zones Special Implementation Task Force and those of the IMT-GT Chief Ministers and Governors' Forum (CMGF) Retreat (Lord and Tangtrongita, 2013a). It offered a practitioner's guide to the different dimensions to be considered in the SBEZ design and implementation and it served as a basis for deliberation about the approach and coverage of the scoping study and the comprehensive SBEZ study.

Based on the decisions adopted by the Task Force, the consultants began formal work on the assignment on 10 February 2014, following issuance of the notices to proceed for both consultants by the Asian Development Bank. Fieldwork by the consultants was preceded by a visit to the border area on the part of the National Economic and Social Development Board (NESDB) on 16-24 February 2014 that included two consultant associates from the present team.

Their role in that mission was to represent the present consultancy in meetings and gather information obtained from site visits by NESDB.

The consultants' first field visit to the Thai side of the border took place on 2-7 March 2014 and, based on those findings, an Interim Report was prepared and delivered to the ADB on 29 March 2014 (Lord and Tangtrongita, 2014). The second field visit to the border concentrated on the Malaysian side and was carried out on 30 March – 4 April 2014. Following the completion of the fieldwork, the consultants prepared the Draft Final Report and presented it to the Asian Development Bank on 22 April 2014. The report was then presented to the IMT-GT Special Border Economic Zones Special Implementation Task Force in Malacca, Malaysia on 23-25 April 2014.

Figures 1.1 and 1.2 show the routes taken during the two field visits and Annex B presents details of the activities carried out during the fieldwork. Figure 1.3 outlines the schedule of the entire consultancy.

#### **D. Report Structure**

This report presents the findings of the scoping study. Following this introductory chapter, the second half of the introductory Part I explains meaning and coverage of SBEZs and how they differ from traditional Special Economic Zones (SEZs). It also describes cross-border investment policies and incentive schemes, especially as they apply to SEZs, and it lays out the analytical foundation of each of the potential eight border sites. This part of the report concludes with a proposed roadmap for the design and implementation of the SBEZ following international best practices, which in turn has guided the assessment of the border areas under review.

Part II covers the border crossing areas in considerable detail and include component ratings and associated strengths and drawbacks of each border crossing area. It describes the study area in the context of the IMT-GT sub-region and its corridors, and it highlights the main elements of the strategic development plans by the governments of Malaysia and Thailand, particularly as they relate to the development of an SBEZ. On the Thai side, the development plans are based on the Southern Regional Development Plan, while on the Malaysian side they consist of the Northern Corridor Economic Region (NCER) and the East Coast Economic Region (ECER).

Part III presents the comparative ratings of the eight border crossings and recommendations for follow-up activities and coverage of the comprehensive study. The ratings reflect two SBEZ levels: first, Level 1 SBEZ considers independent activities undertaken by Malaysia and Thailand on both sides of the border; second, Level 2 SBEZ considers that a degree of formal and informal collaboration on the development of an SBEZ is undertaken by Malaysia and Thailand.

Part IV summarizes the results and provides some recommendations for follow-up activities, for example, the need to carry out a sensitivity study based on a perception survey of the local population along the border about the perception of an SBEZ in their area. The importance of this analysis was underscored by the TF-SBEZ in their November 2013 meeting and confirmed by the present scoping study during fieldwork activities. Details of the recommendations that can be made for the comprehensive study must await the decision of the TF-SBEZ on the possible location(s) of the SBEZ.

The annexes to this report consist of (a) the Terms of Reference (TOR) for the scoping study; (b) details of the activities carried out during the present consultancy; and (c) list of persons met during the fieldwork.

## E. Acknowledgement

The authors are grateful to the members of the IMT-GT Special Border Economic Zones Special Implementation Task Force for guidance in the scope and coverage of this report. In carrying out the field work on the Malaysian side of the border, they are grateful to the Centre for IMT-GT Subregional Cooperation (CIMI) and the Economic Planning Unit (EPU) for their detailed arrangements for the site visits. Likewise, in Thailand the National Economic and Social Development Board (NESDB) provided strong support to the consulting team's field work on the Thai side of the border. Moreover, team benefited from the opportunity given to the associates to accompany NESDB during their field trip to the border area. The authors would like to thank each and every one of the individuals and agencies with whom they met during the field work, and whose name and organization appear in Annex C of this report. Finally, the views expressed in this report do not reflect those of the Asian Development Bank (ADB) or any other entity directly or indirectly associated with the project.

**Figure 1.1: Route Taken in Two Fieldtrips to Thai-Malaysian Border Area**



**Figure 1.2: Timeline of Scoping Study Activities**

	February			March				April				May
	2	3	5	1	2	3	4	1	2	3	4	4
Notice to Proceed issued for both consultants												
Consultant Associates accompany NESDB fieldtrip												
Preparation for field trip												
Fieldwork on Thai side of border												
Preparation of Interim Report												
Fieldwork on Malaysian side of border												
Draft report preparation												
Workshop												
Final report preparation												
Milestones (end of week indicated)												
Interim Report												
Draft Final Report												
Workshop												
Final Report												

## II. SBEZ CONCEPT AND IMPLEMENTATION FRAMEWORK

### A. SBEZ Concept

A Special Border Economic Zone (SBEZ) is a network of activities that seeks to promote cross-border trade and investment and encourage the economic and social development of an area along the border between countries. It encompasses the concept of a Special Economic Zones (SEZ) but it covers a broader set of additional that operates as a bilateral border project. Figure 2.1 provides a summary comparison between an SBEZ and an SEZ, while Figure 2.2 shows the major activities involved in the SBEZ implementation.

**Figure 2.1:** Difference between an SBEZ and an SEZ

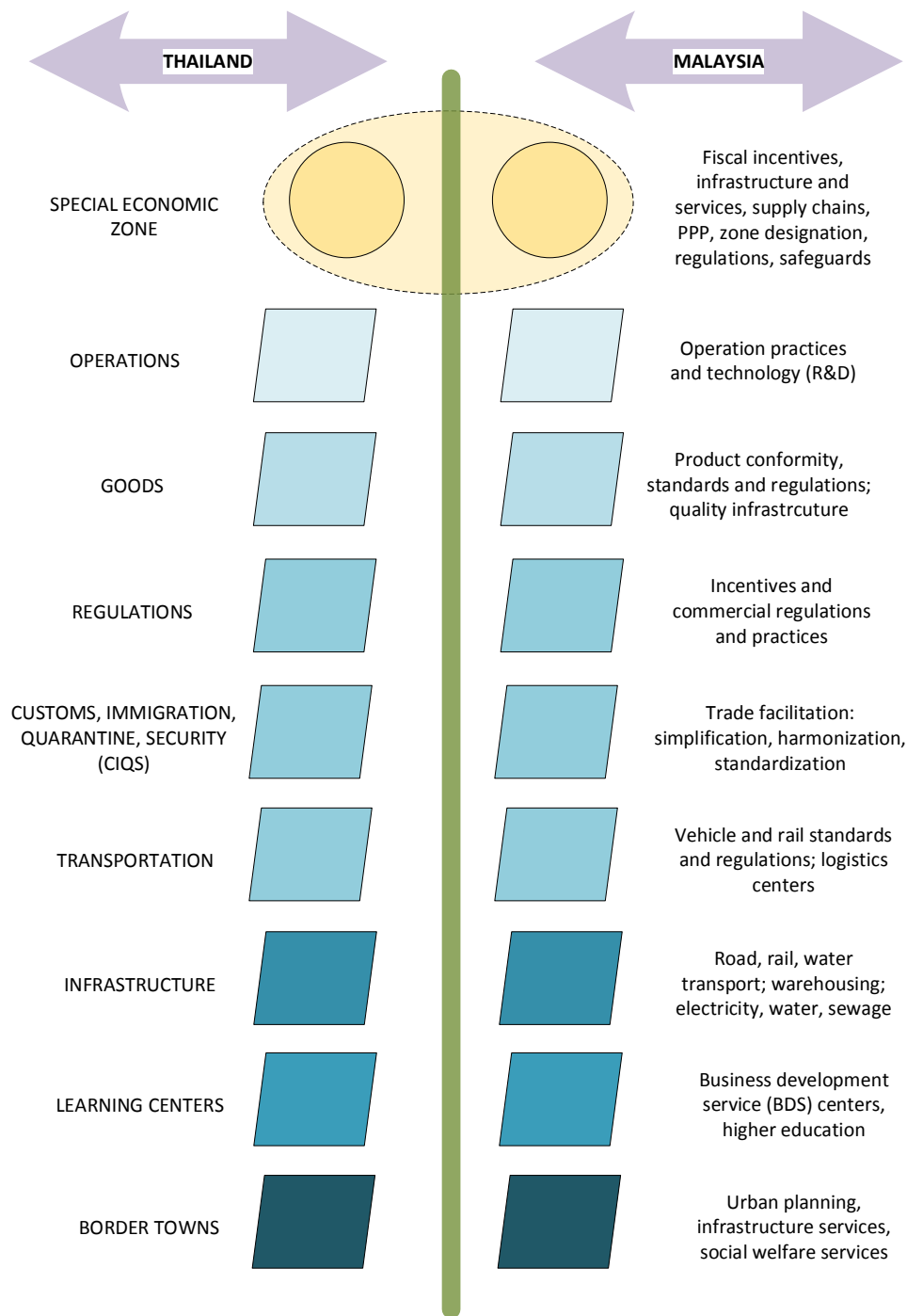
Special Economic Zones (SEZ)	Special Border Economic Zone (SBEZ)
<p>An SEZ is generally defined as a geographically delimited area, usually physically secured (fenced-in) that has a single management and administration, provides special incentives and other benefits to companies located within the zone, and has a separate customs area to provide duty-free benefits and streamlined procedures.<sup>2</sup></p> <p>Incentives are often based on duty-free trade and the absence of exchange controls, the facilitation of licenses and other regulatory requirements, reduced corporate and value-added tax obligations, and the elimination of local fees. Those benefits are intended to lower production costs for goods processed and manufactured within the area and thereby offer companies the opportunity to sell those goods at more competitively prices than if they were produced elsewhere in the host country.</p> <p>In most cases, an SEZ is structured as a Public-Private Partnership (PPP) in which the public sector provides some level of support such as infrastructure, equity investment, and soft loans or bond issues, while the private sector contributes towards capital investments, employment, and local and provincial economic growth.</p>	<p>An SBEZ generally refers to a geographic region located along an international border crossing that is designated as a bilateral project area targeting a range of activities like infrastructure development, construction of transport and logistics hubs, and the overall facilitation of cross-border trade and investment.<sup>3</sup> In some cases, it can include cross-border 'sister city' pairing.<sup>4</sup> The objective is to bolster the economic development of a border area as part of a subregional development strategy.</p> <p>The SBEZ operates under the same principles as the SEZ: (i) investors are allowed to import and export free of duties and exchange controls; (ii) licensing and other regulatory processes are facilitated; and (iii) firms are usually freed from paying VAT, corporate taxes, and local taxes. However, it encompasses a wider set of components that support physical connectivity in the form of transport, communications and energy links, and soft infrastructure related to (a) governance (business laws and regulations affecting the facilitation of trade, investment and finance); (b) economic infrastructure (logistics facilities and systems, finance, and processing, and storage facilities; and (c) social infrastructure (border towns, education and research systems, and social welfare and healthcare systems).</p> <p>The fairly broad range of soft and hard infrastructure needed in the common territory between the two countries required close institutional collaboration for the joint planning and management of trans-boundary flows of goods and services as well as the movement of people.</p>

<sup>2</sup> An SEZ generally includes free trade zones (FTZ), export processing zones (EPZ), free zones (FZ), industrial parks or industrial estates (IE), free ports, free economic zones, and urban enterprise zones. See FIAS (2008).

<sup>3</sup> The terms SBEZ is similar to, and therefore interchangeable with, Special Border Zone (SBZ) and Border Trade Zone (BTZ).

<sup>4</sup> For applications in the Greater Mekong Subregion (GMS), see Choen Krainara (2008)

**Figure 1.2: Network of Activities in SBEZ**





An SBEZ needs to be formulated as a separate and distinct form of Special Economic Zone (SEZ), one that differs importantly from conventional zones that are located near gateways to international markets in an effort to lower production and logistics costs of companies. Instead, the intent is for the SBEZ to attract investors in productive activities that promote subregional value chains in order to stimulate cross-border trade and investment, serve as a catalyst to commerce along the IMT-GT corridors and help to substantially improve the social and economic welfare of the population along the border provinces.

It is important to recognize that an SBEZ is unlikely to attract investment, create employment and generate spillovers into the local economy based solely on the existence of either the SEZ incentive regime, an attractive master plan or the site's built-up infrastructure and services. The success of those factors is more closely associated with SEZs located near gateways to international markets. Those SEZs offer conditions that not only lower production costs but also transport and logistics for companies that are often part of a vertically and spatially fragmented industrial system for a highly integrated global production network. That need for locational advantage has given rise to new Special Economic Mega-Zones (SEMZs) to accommodate the trend towards global production networks and proximity requirement to international gateways.<sup>5</sup>

An SBEZ that is far from gateways to international markets cannot effectively compete at the same level as traditional SEZs and emerging SEMZs. Instead, what determines its success is its relevance to the specific context in which it is introduced, and the effectiveness of its design, implementation and ongoing management in that program. Past experience shows that the long term, sustainable success of SBEZs has also been associated with their integration into the strategic development plans of bordering countries, along with improvements in local and regional social and environmental conditions, and the provision of capacity building and training to the workforce as a means of attracting high value-added service and manufacturing activities in the area (Farole, 2011).

## **A. Motivation for Thai-Malaysian SBEZ**

The motivation for establishing an SBEZ along the Malaysia-Thai border are (a) to attract foreign and domestic investment, along with the transfer of know-how and technology; (b) to generate employment in the area and develop skills for the local population; (c) to support cross-border trade and investment, especially along corridors; (d) to enhance social and economic development in the border provinces in order to promote peace and harmony, and the well-being of the local population; and (e) to serve as a 'demonstration area' and transition to wider subregional and regional integration.

**Investors:** For investors, the attractions range from sourcing low-cost inputs to production networking and participation in value chains. However, reliance on low-labor costs is proving to be increasingly unsustainable because of their economic and social implications. Moreover, rising competition among countries to attract FDI can lead governments to offer greater incentives to multinational companies than they could obtain in neighboring countries, with the result that a 'race to the bottom' occurs as different countries compete with each other to offer greater incentives to multinationals. Downward spiraling labor costs and upward spiraling trade preferences and fiscal incentives are not sustainable and can instigate further distortions.

Instead, there are important benefits to be had from training and social infrastructure both for improving livelihoods and for transitioning industries to higher value added activities. Skills development and training of the local workforce help to shift the type of FDI inflows from those

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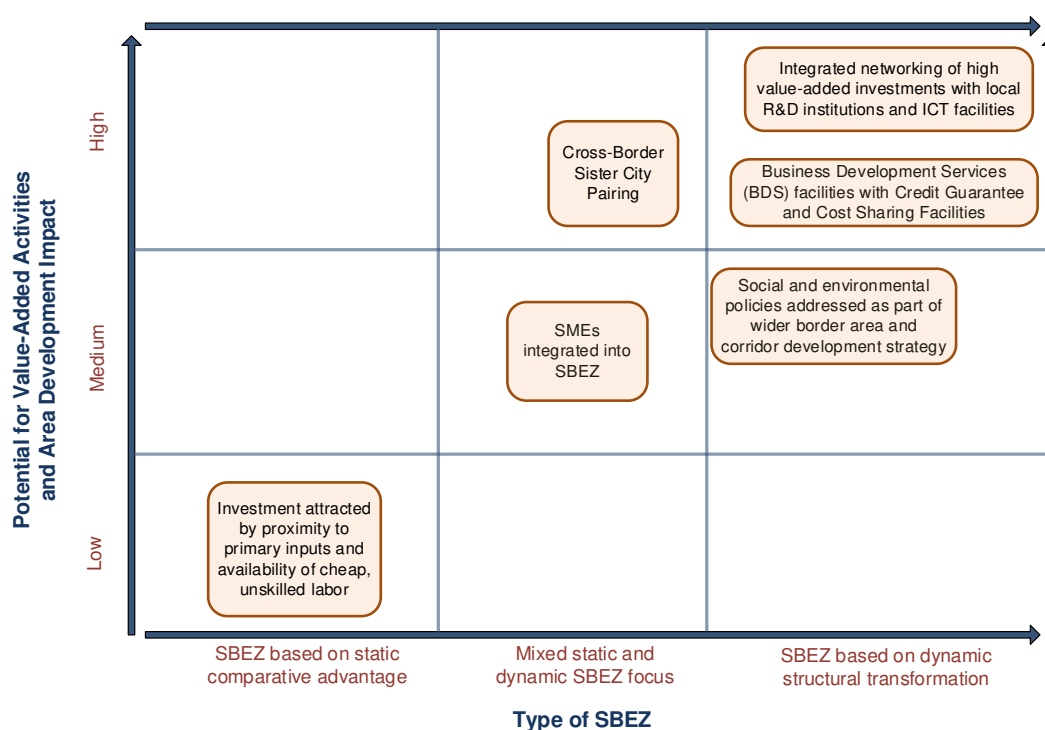
<sup>5</sup> For details, see Rimmer and Dick (2010), where the authors point out that in Thailand, for instance, 80 percent of SEZs are located within 2.5 hours of Bangkok.

that rely on unskilled labor and natural resource intensive activities to those that utilize skilled and capital intensive ones. As a result, the development of the border area is more likely to benefit from a focus on higher value-added manufacturing and service activities in areas such as information and communication technology (ICT), business support services, knowledge-based activities, and research and development (R&D) than from a reliance on traditional SBEZs that depend on proximity to primary inputs and cheap, unskilled labor along the border.

**Value Adding and Development Potential:** Figure 2.3 shows how shifting from a traditional SBEZ model to one with dynamic forward and backward linkages and an integrated area development framework can lead to increased value-added activities and economic development in the border area. It requires not only designing the SBEZ in such a way as to attract investments in integrated value chains that encourage SME participation, but also broader initiatives that extend beyond the SBEZ site itself in area-wide activities promoting skills development, training, and knowledge sharing; promoting industry clusters and targeting links with zone-based firms at the cluster level; supporting the integration of subregional value chains; and ensuring skilled labor mobility across firms.

**Public Sector:** For the public sector, there is a growing interest in expanding employment and well-being in the corridor nodes located away from megacities to reduce agglomeration.<sup>6</sup> Studies in the economics of geography for Southeast Asia suggest that without corridor development, population agglomeration in major urban centers will continue to expand in Bangkok, Kuala

**Figure 2.3:** Value Adding and Development Potential of SBEZ



<sup>6</sup> Corridor nodes refer to strategic points along an economic corridor and are classified into the following four types: (a) *border node* refers to border areas between two members of the same corridor where cross-border trade takes place; (b) *commercial node* refers to important commercial centers along a corridor; (c) *gateway nodes* refer to ports at the end-points of a corridor that provide access to external markets; and (d) *interchange nodes* refer to strategic areas along a corridor that intersect other corridors. See ADB, "Development of Economic Corridors" at <http://www.adb.org/countries/gms/sector-activities/multisector>.

Lumpur and elsewhere in the region, creating growing income inequality between those megacities and the rest of the geographic areas in the respective countries (Kumagai, Gokan, Isono and Keola (2008). Development of economic corridors and border nodes along those corridors can ameliorate the otherwise growing income and welfare dispersion between those megacities and other parts of the countries. And those studies point to the importance of ensuring a holistic approach to the development of border gateways rather than focusing on transport infrastructure.

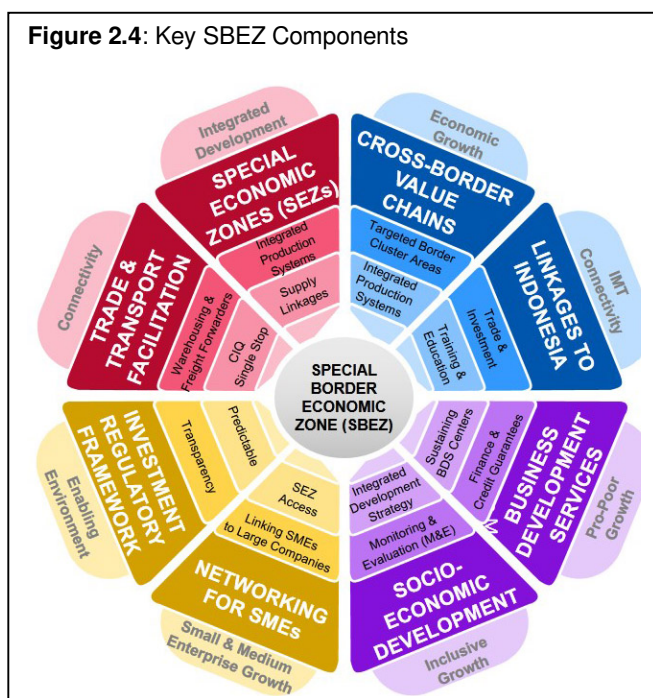
**Extending Benefits:** Another motivation for the SBEZ that it offers an opportunity to advance conditions at the subregional level that will in 2015 be implemented at the regional level under the ASEAN Economic Community (AEC). The IMT-GT Implementation Blueprint (2012-2016) emphasizes the importance of its subregional cooperation as a building block for the AEC and therefore as a contributor to the realization of that ASEAN community building (IMT-GT, 2012). That interest is reflected in the ADB's support for trade facilitation on the IMT-GT and GMS regional cooperation programs as a means of helping the participating countries to move closer to the AEC vision of ASEAN as an integrated production base and market (ADB, 2012). That technical assistance targets the IMT-GT and other subregions' legal, regulatory and institutional environment for cross-border trade facilitation, which is essential to the SBEZ's success.

## B. SBEZ Components

The SBEZ border area assessment is based on six key components (Figure 2.4):

- (1) *Special Economic Zone (SEZ).* The SEZ is a core component that refers to the geographically delimited area on either side of the Thai-Malaysian border or straddling both sides. Special incentives and a tax-friendly environment are to be offered to companies located within the zone, usually physically secured (fenced-in) and under a single management and administration, with a separate customs area to provide duty-free benefits and streamlined procedures. Key elements include access by companies to the zone's resources, as well as beneficial taxation schemes and reduced customs oversight.

**Figure 2.4: Key SBEZ Components**



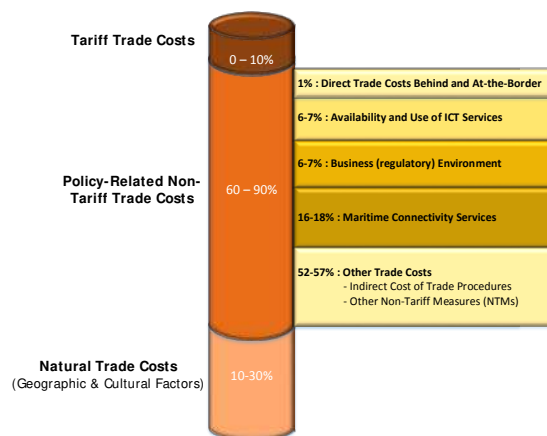
- (2) *Cross-border value chains.* The SEZ can provide opportunities for industrial upgrading along cross-border value chains in Thailand and Malaysia, as well as Indonesia and other countries that form part of regional or global value chains. Companies operating in the SEZ can increase their participation in those regional and global value chains both by increasing the import content of their products (foreign value added) and by generating more value added through goods and services for intermediate use in exports to neighboring countries. Upstream and downstream links in the value chain can serve to build local area capacity and generate positive results for



the local economy by growing local value added in manufacturing and agro-processing activities.

- (3) *Transport and logistics.* By its very nature, the SBEZ represents an integral part of the IMT-GT transport corridor system and its underlying motivation remains the transformation of the system from a transport corridor to an economic corridor. The associated trading costs for moving goods and people along the corridor system are an integral part of the ability and willingness of companies to locate in the border area. Those costs are no longer dominated by tariffs since the ASEAN CEPT-AFTA and other multilateral and regional preferential arrangements have greatly reduced their incidence. In fact, tariffs generally account for no more than 10 percent of direct and indirect costs associated with factors other than transportation, whereas non-tariff measures (NTMs) can account for as much as 90 percent of those costs (Figure 2.5). Those NTM costs, which include the costs of complying with a myriad of licenses, permits and certificates associated with moving goods across border, affect not only the international competitiveness of businesses in the border area, but also the ability of enterprises to understand the complexity of those measures and participate in regional and global value chains. For trade between Thailand and Malaysia, the ad valorem tariff equivalent of all trade costs is, on average, equal to 47 percent.<sup>7</sup> But that average obscures large differences between trade in agricultural, where the average ad valorem tariff is 103 percent, and that in manufactures, where it is 38 percent (Figure 2.6). For that reason, factors affecting trade and transport costs at the designated border crossing will have large implications for the ability of the SBEZ to attract investors to the area, and the types of industries that can be drawn to the area.

**Figure 2.5: Non-Tariff Measures in Total Trade Costs**



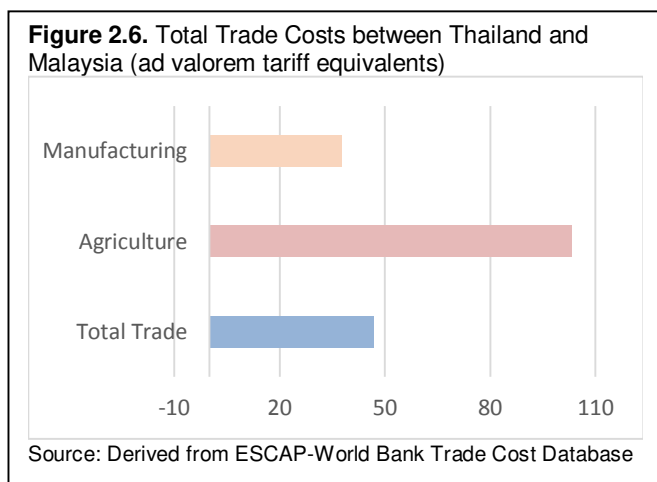
Source: World Bank (2014).

- (4) *Legal and regulatory framework.* An important part of the attraction to the border area will be the simplification of the regulatory regime that usually accompanies the establishment of an SEZ. Streamlining the regulatory process can cover the investment approval process, work permits for expatriates, removal of required import and export licenses, provisions for services such as commercial and professional activities, allowance of zone developers to supply utilities to the zone, use of private rather than public development or a public-private partnership for development, and the relaxation of minimum export requirements and labor and environmental laws.
- (5) *Socio-Economic development strategy for the area.* What differentiates the SBEZ from other SEZ forms is its strategic integration into the development strategy for the area surrounding the border. The long term, sustainable success of the SBEZ will therefore

<sup>7</sup> Based on data from ESCAP-World Bank Trade Cost Database, available at <http://data.worldbank.org/data-catalog/trade-costs-dataset>.

need to be closely associated with the strategic development plans of the bordering provinces or states where the SBEZ is to be located. Along with improvements in local and regional social and economic conditions, the development strategy will need to incorporate provisions for training and education of the workforce as a means of attracting high value-added service and manufacturing activities in the area. Industrial development of the area could compete with tourism and particularly the growing trend towards ecotourism and sustainable development. In some areas of the Thai-Malaysian border, industrial development could threaten ecosystems. Service-led development could be more beneficial to local communities, especially where land is limited or has already been allocated to the preservation of natural resources or development focus for the area is economic, ecological, and cultural sustainability. The SBEZ must therefore consider its strategic context in the socio-economic development of the designated border area, and how it can transform the area into comprehensive model of trade, tourism, retail and industrial development. Rule of law and the ability to mitigate security risks is a necessary part of efforts to attract investment in the border area, and therefore form an integral part of the socio-economic development affecting welfare improvements of people in the region.

- (6) *SME development.* A pro-poor strategy for inclusive growth in the border area will require a degree of government intervention to cultivate the growth of SMEs. Typically, an SEZ will favor large businesses with world-class infrastructure to support large-scale value chains through incentives to facilitate imports of materials and exports of intermediate or finished products under favorable conditions and streamlined procedures. Nevertheless, significant backward supply linkages and sub-contracting relationships can be developed and encouraged with local small and medium-size enterprises. These opportunities can be in the form of knowledge spillovers and direct financing opportunities from the large firms, for example, in the form of collateralizing receivables from the large businesses operating in the supply chain.



For these opportunities to occur, however, local and national government authorities need to ensure that there exists a level playing field for small and medium size local firms and large businesses, for example, in the ability to access goods from international suppliers on a tax or duty-free basis, or their ability to supply large businesses at the same competitive terms as foreign suppliers. Additionally, SMEs are usually located outside the physical zone area, regulations and procedures restrict purchases by large businesses located in the zone of locally produced items outside the zone. Duty-drawback schemes can be extended to SMEs outside the zone for production enable direct and indirect exporters based outside the zones to access production inputs on a duty-free basis, but delays and bureaucracy usually dissuade SMEs from using the mechanism (Farole, 2011). One way to overcome these and other obstacles would be to create a dedicated industrial zone for supporting industries, for example, similar to the one established in Bac Ninh province of Vietnam (Trinh, 2011). Such a dedicated zone would operate in tandem

with the SEZ and facilitate management and administration of SME incentive programs and policies in the border area.

(7) *Business development services.* Pro-poor efforts to integrate SMEs into the area's large-

**Figure 2.7:** Key Parameters of SBEZ Components

<b>Special Economic Zones (SEZs)</b>	1. Existing facilities, if any
	2. Size of SEZ
	3. Existing companies/industries
	4. Integrated production systems
	5. Existing investment promotion strategy
	6. Environmental assessments
<b>Value Chains</b>	1. Existing value chains
	2. Linkages to neighboring states
	3. Cross-border value chains, actual or potential
	4. Comparative and competitive advantages in sectors and industries
	5. High-value activities and their market potential for investors
<b>Transport and Logistics</b>	1. Links to IMT-GT corridors
	2. Road and rail infrastructure
	3. Warehousing facilities
	4. Telecommunications infrastructure and IT services
	5. Warehousing and distribution
	6. Quality/standards inspection agencies
	7. Health/sanitary and phytosanitary (SPS) agencies
	8. Trade- and transport-related providers or associations
	9. Distance and cost to major distribution center
	10. Cost of shipping to distribution center (specify location)
<b>Legal &amp; Regulatory Framework</b>	1. Regulations
	2. Incentives
	3. Zoning and land use master plan
	4. Legal framework for zone site
<b>Socio- Economic Development</b>	1. Development strategy
	2. Implementation status
	3. Cross-border synergies
	4. Security and rule-of-law
<b>SME &amp; BDS Development</b>	1. SME business development centers
	2. Networking systems for SMEs
	3. Financing and credit guarantee facilities
<b>Linkages to Indonesia</b>	1. Potential trade with Indonesia
	2. Potential investment from Indonesia
	3. Potential Indonesia workers in SBEZ
	4. Potential Indonesia investment in SBEZ
	5. Potential Indonesia training/education in area or region

scale value chains are likely to require a fairly broad based implementation strategy that

covers a wide range of capacity building mechanisms. At a first stage, efforts could focus on enterprises in the dedicated industrial zone for supporting industries mentioned in Component (6) above. Those efforts could extend beyond the management and administration of incentive programs and policies in the border area to provide capacity building in areas that form part of specific value chains identified in the area's development strategy (Component 5 above). At the next stage, a Business

Development Service (BDS) center could be established to provide skills and expertise in basic business practices and core areas of expertise for the targeted value chains. Sustainability of the BDS center would need to include the creation of a financing mechanism to sustain entrepreneurial activities, for example, through a Cost-Sharing Facility (CSF) and Credit Guarantee Facility (CGF).

- (8) *Linkages to Indonesia.* Possible linkages to Indonesia include the following: (a) potential imports of material inputs and exports of processed goods by the companies located in the zone; (b) investment in large-scale value chains by large Indonesian businesses; (c) provision of unskilled and skilled workers in the SEZ and associated industrial areas for supporting industries; (d) training and education in the learning centers that includes an internship in company activities in the SEZ or the supporting industries outside that zone.

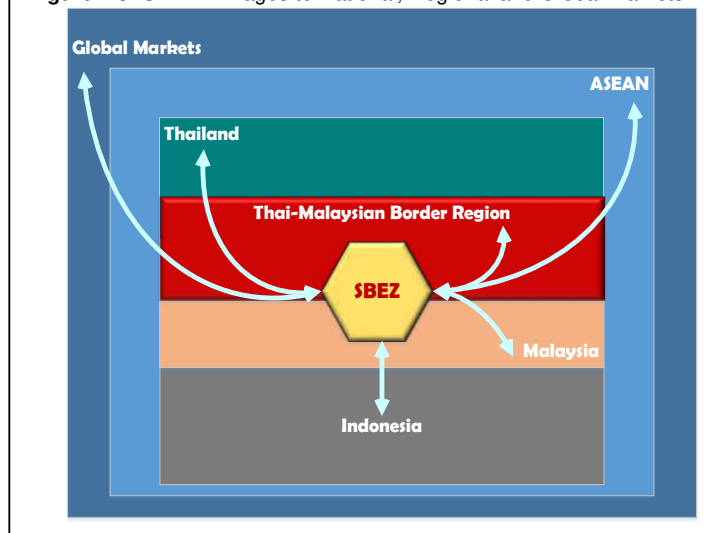
**SBEZ Parameters:** Within each of the components, there are a number specific evaluation parameters described in Figure 2.7.

- For the *SEZ and related fiscal incentives*, the parameters are adopted from UNIDO's standard evaluation approach to industrial projects (UNIDO, 1986) and more recent rating schemes for SEZs (Chanada, Das and Ganesh, 2014).
- For *transport and logistics*, the parameters are taken from the World Bank's annual evaluation survey for the Logistics Performance Index (World Bank, 2013).
- For *value chains*, the parameters are adopted from the methodology used to identify value chains along economic corridors in a recent ADB study (Lord and Tangtrongita, 2010).
- For *socio-economic development of areas along economic corridors, SME development along those corridors and supporting business development services (BDS)*, the evaluation criteria are adopted from the strategy and action plans for the Greater Mekong Subregion (GMS) and Central Asia Regional Economic Cooperation (CAREC) (ADB, 2010; ADB 2011).

### C. Roadmap

The operational approach to implementing the SBEZ is best viewed as an incremental approach to cooperation between Malaysia and Thailand. Formal approval of an SBEZ and all the

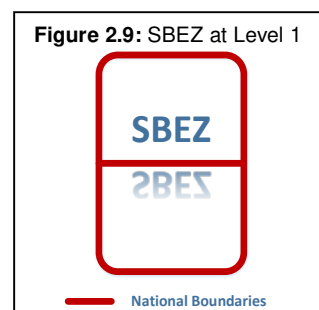
**Figure 2.8: SBEZ Linkages to National, Regional and Global Markets**



accompanying hard and infrastructure involved in its implementation is complex and time consuming. For that reason, independent actions on either side of the border reflects a gradual move from informal to formal mechanisms of collaboration provide an effective mechanisms for achieving any long-term goal involving the operation of a joint SBEZ. This stepwise approach reflects international best practices for the development of cross-border SEZs in Europe, North America and Asia.<sup>8</sup>

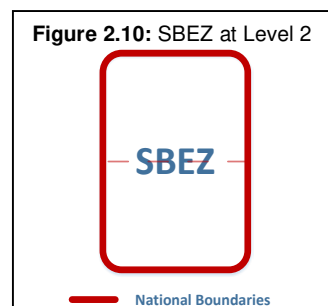
*Level 1: Establishment of SBEZ facilities and supporting activities on either or both sides of the border (Figure 2.9).*

At this stage, the development of the zone is based on a simple model of trade grounded on the comparative advantages of two adjoining areas of Malaysia and Thailand and possible outbound trade with other countries, including Indonesia. As such, the development of an SEZ on one side of the border should initially reflect the viability of the project based on existing trade conditions. Those conditions refer specifically to the components described in the previous section and the specific evaluation parameters associated with each of them. At this stage, the decision-making process should be independent of any plans or programs that have not been completed on the other side of the board, since the viability of the zone should remain within the control of either one country or the other.<sup>9</sup> The driving force behind the development of an SEZ and its supporting activities should be entirely grounded on market-driven factors, which over time can incorporate social and economic welfare considerations.



*Level 2: Development of cross-border value chains and hard and soft infrastructure supporting the SBEZ (Figure 2.10).*

Cross-border cooperation can take the form of either formal or informal agreements to develop or upgrade transportation facilities such as railway linkages or roads supporting trade along a specific border area. At the policy level, the implementation of an agreement similar to the Greater Mekong Subregion's (GMS) Cross-Border Trade Agreement (CBTA) could provide a practical approach to streamlining regulations and reducing nonphysical barriers between IMT-GT member countries. It would respond to the emerging necessity to strengthen the related software to complement large-scale SEZ-related investments in physical infrastructure in order to achieve the benefits of greater economic connectivity along the border area. At this stage, management committees or boards can be formed by each side and joined by a full-time joint expert group for government and business coordination and communication. Finally, ADB capacity building in IMT-GT projects could engender trust and collaboration between stakeholders on both sides of the border in the design and implementation of cross-border trade and investment projects for the SBEZ.

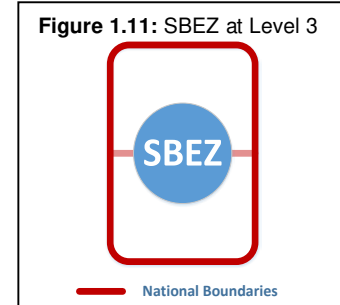


<sup>8</sup> For a review, see Wallack (2011).

<sup>9</sup> Figures 7-9 are adapted from Lalkaka, Nguyen and Xiaohui (2011).

*Level 3: Collaboration in joint SBEZ facilities and supporting activities (Figure 2.11).*

The final stage of collaboration involves a more comprehensive model covering cross-border trade and investment, services, learning centers, retail and industrial development and, ultimately, finance. At this stage, a joint institutional operating framework is needed to coordinate all issues that arise at the government and business levels, including modern border crossing facilities, infrastructural linkages, industrial zones, commercial areas, and fiscal regulatory and legal policies in the area. Apart from the involvement of full-time staff, the operational framework will need to include business representatives that can help guide the decision-making process to ensure that the results are economically and practically viable.



In general, best-practices suggest that the approach to building collaboration between locally based stakeholders of the SBEZ should use a bottom-up approach rather than central government ministries that may have divergent interests and priorities at the national level. Growth in trade or the need to work together at the borders for developing new industries and markets are common motivations for joint institution building. Informal committees or organizations such as those formed by chambers of commerce from both sides of the border allow for the building of cross-border institutions as an incremental process based on changing socio-economic conditions in the area.

## **PART II. BORDER AREA PROFILE**



### III. CHARACTERIZATION OF STUDY AREA

#### A. Subregional and Corridor Context

The IMT-GT Implementation Blueprint for 2012-2016 focuses its project clusters around the IMT-GT connectivity corridors that serve as the channel through which development is to disseminate to areas throughout the subregion (Figure 3.1).<sup>10</sup> For the Straits of Malacca Economic Corridor, development is to focus on the large-scale development of the SBEZ, based on the preparation of a master plan and an implementation strategy for the provinces in the border of Thailand and Malaysia. Moreover, the impact of the SBEZ is expected to link to Indonesia through connectivity to other corridors and serve as a subregional-level demonstration model of the conditions that will exist on a broader scale under the ASEAN Economic Community starting in 2015.

**Figure 3.1: IMT-GT Corridors and Thai-Malaysian Border**



Source of Map: Google map modified by authors.

<sup>10</sup> Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT), "Implementation Blueprint 2012-2016". Available: [http://imtgt.org/Documents/IMT-GT\\_Implementation\\_Blueprint\\_2012-2016.pdf](http://imtgt.org/Documents/IMT-GT_Implementation_Blueprint_2012-2016.pdf).



## B. Thai-Malaysia Border Area

The Thai Malaysian border extends 646.5 km. kilometers along the Malay Peninsula. On the Thai side of the border are the provinces of Satun, Songkhla, Yala and Narathiwat, and on the Malaysian side are the states of Kedah, Kelantan, Perak and Perlis (Figure 3.2).

There are also two rail crossings along the Malaysian-Thai border:

- *Padang Besar (Perlis State) – Padang Besar (Songkhla Province)*: The Malaysian and Thai towns where the crossing is located are known by the same name. The rail crossing connects to Malaysia's West Coast trunk line and Thailand's main southern line to Bangkok via Hat Yai. Both Malaysian and Thai customs, immigration and quarantine formalities are conducted at Malaysia's Padang Besar railway station.
- *Rantau Panjang (Kelantan State) – Sungai Golok (Narathiwat Province)*: On the Malaysian side, the rail crossing is on a branch line that is connected to Malaysia's East Coast line. In Thailand, the crossing is connected to the Sungai Golok branch line, which links up with the main southern line at Hat Yai.

**Figure 3.2 Thai-Malaysia Border Provinces (Thailand) and States (Malaysia)**



**Figure 3.3 Thai-Malaysia Border Provinces (Thailand) and States (Malaysia)**



Border crossings exist in the following points (Figure 3.2):

	Thai Side	Malaysian Side
1	Wang Prachan (Satun Province)	Wang Kelian (Perlis State)
2	Padang Besar (Songkhla Province)	Padang Besar (Perlis State)
3	Sadao (Songkhla Province)	Bukit Kayu Hitam (Kedah State)
4	Ban Prakob	Durian Burung (Kedah State)
5	Betong (Yala Province)	Pengkalan Hulu (Perak State)
6	Ban Buketa (Narathiwat Province)	Bukit Bunga (Kelantan State)
7	Su-ngai Kolok District (Narathiwat Province)	Rantau Panjang (Kelantan State)
8	Takbai (Songkhla Province)	Pengkalan Kubur (Kelantan State)

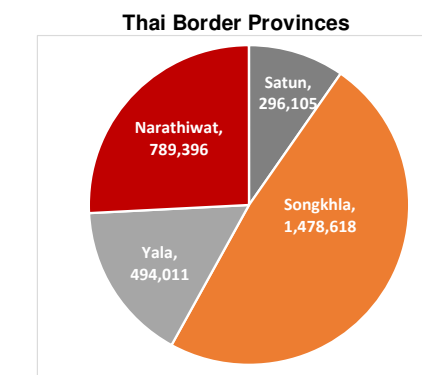
## IV. REGIONAL DEVELOPMENT PLANS

### A. Overview

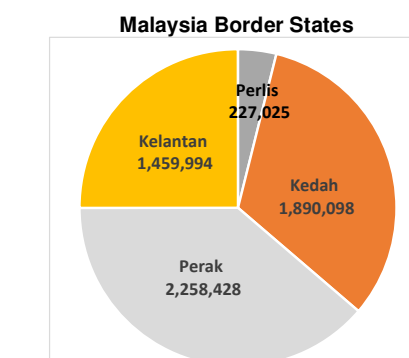
On the Thai side of the border, there are four provinces and they are, from west to east, as follows: Satun, Songkhla, Yala and Narathiwat. They form part of the so-called Southern Border Provinces Special Zone, which also includes the province of Pattani, although that province does not border Malaysia (Figure 4.1). Together the population size of the four border provinces is 3 million, with Songkhla accounting for one-half of the population and Narathiwat just over one-fourth of the total. With a land area of 7,394 km<sup>2</sup>, representing nearly 40 percent to the total area of the border provinces, Songkhla is the largest province and also the one with the highest density at 200 people per square kilometer. Narathiwat and Yala have similar land areas of 4,475 and 4,521 km<sup>2</sup> respectively, each representing 24 percent to the total area of the border provinces). Yala's population density is the lowest in the region at one-half of that of Songkhla, and Narathiwat's population density is equal to 176 persons per square kilometers. Satun is the smallest province, having a land area of 2,479 km<sup>2</sup>, equivalent to 13 percent of the total area of the border provinces. Its population density is low at 120 persons per square kilometer.

On the Malaysian side, there are four states, which from west to east are Perlis, Kedah, Perak, and Kelantan. The total population of the four states is 5.8 million, with Perak State accounting for almost 40 percent of the total; Kedah State, about one-third of the total; and Kelantan State, one-fourth. Perlis State has the smallest population that represents 4 percent of the total (Figure 4.1). However, despite its small

**Figure 4.1: Population Distribution**

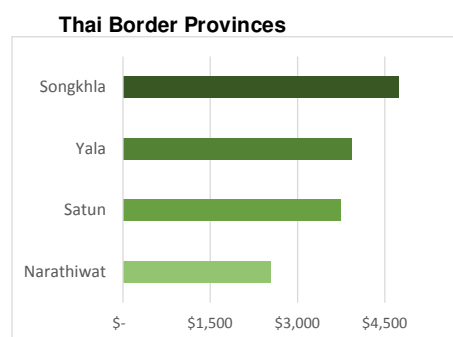


Source: National Statistical Office of Thailand.

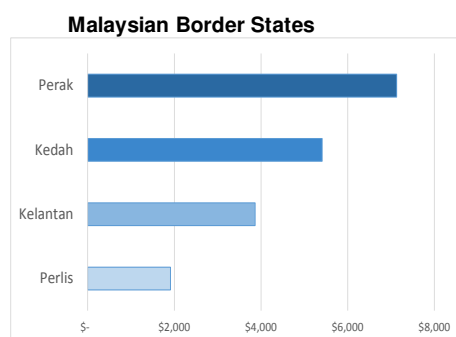


Source: Department of Statistic of Malaysia.

**Figure 4.2: Gross Provincial Product (GPP) of Thai and Malaysian Border Provinces and States**



Source: National Statistical Office of Thailand.



Source: Department of Statistic of Malaysia.

**Figure 4.3: Per Capita Incomes of Border Provinces and States**



land size of 821 km<sup>2</sup>. Perlis has the highest population density (280 people per square kilometer) among the four states. At the other end, Kelantan has a population density of less than 100 persons per square kilometer. Perak State also has a low population density, only a little higher than Kelantan, while Kedah state's population density is at the twice as high as that of Kelantan but still nearly two-thirds of that of Perlis.

There are considerable differences in the economic conditions of these border provinces and states (Figure 4.2). In Thailand, Songkhla has the highest gross provincial product (GPP), accounting for 60 percent of the entire border provinces. Yala's GPP share is similar to its population share (16 percent), while Satun and especially Narathiwat are the least developed provinces. Per capita GPP in Narathiwat is nearly half that of Songkhla. In Malaysia, Perak State accounts for nearly one-half of the combined gross state product (GSP) of the four border provinces. Kedah accounts for about 30 percent of the total and Kelantan, 17 percent. Perlis' GSP contribution of 4 percent is the same as its population share of the four states. There are large differences in the per capita GSP among the states. Kedah's per capita GSP is about three-fourths of that of Perak, Kelantan's per capita GSP is roughly half of that of Perak; and Perlis' per capita GSP is about one-fourth of that of Perak.

In summary, there is some symmetry between Thai provinces bordering with Malaysian states: Songkhla Province and Kedah State, on the one hand, and Yala Province and Perak State, on the other, have high per capital income levels. In contrast, Satun Province and Perlis State, on the one hand, and Narathiwat and Kelantan, on the other, have low per capita income levels (Figure 4.3).

## **B. Thailand's Southern Region Development Plan**

The development plan for the Southern Border Provinces Special Zone covers the four Thai provinces bordering Malaysia, plus Pattani (see map in Figure 4.3). The development first plan covered 2009-2012 and consisted of six major activities: (a) upgrade local income; (b) ensure security and safety; (c) develop human resources and social service standards; (d) rehabilitate the local economy and investment; (e) connect the local economy with neighboring countries; and (f) improve laws and regulations.

The second strategic plan for southern border provinces covers 2012-2014. It contains nine strategic activities (Office of the Prime Minister, 2013):

- Public participation in tackling problems in the southern border provinces special zone and concerted efforts by all relevant agencies in working in an integrated manner for southern development;
- Empowerment of local villages and communities for peace-building;
- Promulgation of forums for local people to seek solutions to the southern conflict through peaceful means.
- Promotion of religious, multi-cultural, and local history studies.
- Improved efficiency in ensuring justice and protecting the rights and freedoms of local people, together with law enforcement and rehabilitation for affected persons.
- Confidence-building for greater efficiency in local economic development.
- Social, sports, and tourism development, and improved quality of life for the underprivileged.
- Better communication between officials and local people.
- Cooperation with the international community to prepare for the ASEAN Economic Community (AEC).

It also lays out specific targets, among which are (a) increase GDP in agriculture by 5 percent a year; (b) expand investment in halal production by 5 percent a year; (c) increase Thai-Malaysian border trade by 4 percent a year; (d) increase GDP in trade, trade, service, and transport sectors by 5 percent a year; and (c) restore peace in the southern border provinces.

**SBEZ Study on Border Region of Sadao and Bukit Kayu Hitam:** A 2009 NESDB study for SBEZs along the border with Malaysia focused on the Sadao border in Songkhla province for the development of an industrial zone and logistics center (MT-GT Working Group on Trade and Investment, 2010). Site planning and design of the industrial zone in Songkhla SEZ was to be developed in the existing Southern Regional Industrial Estate in Chalung, Hat Yai district. For the logistics center, the potential site was identified as Klong Ngae and Phang La on an area of 100 hectare. It would include the construction of a road connects to Highway No. 4 and to Southern railways network. For site planning and design of the logistics center, Industrial Estate Authority of Thailand standards would be used and three areas were to be designated for the logistics center:

- (a) Area 1 would comprise a CIQ office and logistics station with the area of 11 hectares.
- (b) Area 2 would consist of an extension of three logistics stations in 5 hectares.
- (c) Area 3 would be used as a container yard and for truck parking.

The development of logistics center at Khlong Ngae and Phang La next to railways would be connected to the southern railway at Padang Besar border. The logistics center could be



developed in either of the following ways: (a) *investment solely by private investor*. The Government of Thailand would invest in a CIQ office for public agencies to provide services to business operators in the logistics center, and the Government would provide low interest rate loans to logistics center developers; (b) *joint venture between local administration (provincial level) and private sector*. The local administration would undertake a joint venture with private entities to purchase potential landsite for the construction of the CIQ office and it would allow private entities to develop truck stations for sale or for lease to logistics service companies. The local administration would manage the logistics center. The Government would provide some low interest rate funds to the local administrative organization, and private sector would invest the remaining amount, although the Government would also provide interest funds to business operators who buy or rent out space in the truck station of the logistics center.

### C. Thailand's Cross-Border Investment and SEZ Incentives

Thailand has not yet implements investment regulations and policies for cross border area since the Special Economic Zone Law has yet to be approved by Parliament. Normally, the Board of Investment (BOI) is the government agency responsible for offering incentives to investors. Investment incentives can also be offered by Industrial Estate Authority of Thailand in cases that apply to industrial estates.

**Investment Policy:** The Board of Investment (BOI) has traditionally divided the country into three zones and adopted regional zone system to give more benefit to the companies which are located away from the greater Bangkok area as a means of developing local areas through company investments in those locations. For the southern border provinces, this system has meant being classified under Zone 3 and having the following incentives:

- Eight years of exemptions from corporate tax.
- 50% reduction in corporate income tax for 5 years.
- Double deduction of transport, electricity and water supply costs.
- 25% deduction allowance from net profit for facility installation and construction costs, in addition to normal depreciation.

In 2013 the BOI adopted an investment strategy report for 2013-2017 that targets ten key areas of business activity covering basic infrastructure and logistics (e.g., industrial zones, basic industries like steel, petrochemicals, pulp and paper, machinery and alternative energy and environmental services). Under this new strategy, the BOI is targeting the following sectors that are to benefit from special investment promotion:

- Agricultural and agro-industry
- Mining, ceramics and basic metals
- Light industry
- Metal products
- Electronics industry and electrical appliances
- Chemicals, paper and plastics
- Services and public activities

NESDB is currently evaluating whether to extend the three-zone system to a fourth zone that would be classified as Zone 3+ for border areas, like that for the Thai-Malaysian border area that would extend additional preferential measures and investment incentives to companies. A decision is expected in mid-2014.

**Investment Promotion Zones:** Special BOI tax privileges are given to projects in three Investment Promotion Zones to encourage industrial development in provincial areas in Thailand. Investment promotion applies only to new projects or the expansions of existing

ones. Likely investors are those who export products that use domestic materials, are located in designated provinces, and apply labor-intensive production methods. Different investment privileges are given to investors based on economic factors such as the availability of infrastructure in the designated area. The criteria for granting tax and duty privileges are as follows:

- Exemption of duty on machinery imports.
- Exemption of corporate income tax for 8 years, provided that a project has a capital investment of 10 million baht or more (excluding cost of land and working capital) and that it obtains ISO 9000 or similar international standard certification within 2 years from its start-up date; otherwise the corporate income tax exemption is lowered to 1 year.
- Exemption of import duty on raw or essential materials used in the manufacturing of export products for 5 years.

In addition, for projects in Songkhla Province, the following additional criteria apply.

- (a) A project located within industrial estates or promoted industrial zones is entitled to the following privileges:
  - 50 per cent reduction of corporate income tax for 5 years after the exemption period.
  - Double deduction from taxable income of transport, electricity and water costs for 10 years from when revenue is derived from the promoted activity.
- (b) For a project located outside industrial estates or promoted industrial zones, a deduction can be made from net profit of 25% of the project's infrastructure installation or construction cost for 10 years from the date of initial sales, and net profit for one or more years of any year can be chosen for such deduction. The deduction is additional to normal depreciation.

**Industrial Estates:** The responsibility for investment promotion in industrial estates lies with the Industrial Estate Authority of Thailand (IEAT). Industrial estates are classified as being either a General Industrial Zone (GIZ) or an Export Processing Zone (EPZ).

The GIZ consists of an area designated for industrial activities or other activities beneficial to or connected with industrial activities. The privileges and incentives for a GIZ are as follows:

- (i) Foreign investors are eligible to own land, properties, factories, and infrastructure.
- (ii) Foreign technicians and experts are eligible to work and live in Thailand.
- (iii) Foreign technicians, expert's spouses and dependents can live in Thailand.

An EPZ consists of an area designated for industrial activities, trading or services for the purpose of exporting products. In addition to having the same benefits as the GIZ, it also benefits from the following:

- (iv) Relief from special surcharges, taxes and duties; machinery equipment tools and supplies including parts entering the EPZ for the purposes of producing goods and constructing, assembling or installing a factory or building within the EPZ are not subject to special surcharges under the Investment Promotion Act, import duty excise tax or VAT. Similarly materials brought into the EPZ for the purposes of manufacturing have the same relief.

- (v) Relief from export duty, excise tax and VAT: goods imported under Section 49 of the Industrial Estate Tax will not be subject to export duty, excise tax or VAT provided they are exported.
- (vi) Entitlement to export tax refund/exemption schemes: merchandise entitled to export tax refund or exemption schemes when exports qualify for such schemes after being removed from the EPZ.
- (vii) Zero tax rate on sale of services and goods among industrial operators in EPZs, sale of services or goods between industrial operators.

In case of cross-border zone development in Songkhla province, IEAT encourages the development of the area by supporting the SBEZ. In the past, the NSEDB has proposed the following incentive for the zone (NSEDB, 2009):

- (a) The Special Economic Zone along the border area between Songkhla Province, Thailand and Kedah State, Malaysia should be in the form of Hybrid Export Processing Zone similar to Laem Chabang Industrial Estate in which the IEAT is able to apply the IEAT Act without having to enact new laws or regulations.
- (b) The administration of such Special Economic Zone should be operated by IEAT or a private entity under the supervision of IEAT according to IEAT Act.
- (c) The establishment of National Single Window for Customs procedure connecting to ASEAN Single Window and the implementation of Single Stop Inspection under Cross Border Transport Agreement (CBTA) should be introduced in the Special Economic Zone.
- (d) Tax incentives and privileges should be provided in the Special Economic Zone according to BOI regulations and the IEAT Act.

Furthermore, the NSEDB proposed the following support to logistics activities:

- (a) IEAT to be the authorized facilitator of One-Stop-Services (OSS) that offers investment consultations, facilitates and gives permission to bring in foreign technicians and experts to work and live in the country.
- (b) Operators who invested in an industrial estate to be provided with environmentally friendly production systems.
- (c) Public transportation systems to be available to across the Thailand and Malaysia border.
- (d) Privileges for investors to include:
  - Exemption of tax incentives under the Investment Promotion Law.
  - Bond warehousing service for operators in an industrial estate are except for value added tax (VAT).
  - Permission is given for foreign investors to own in an industrial estate.
  - Permission is given for foreign investors to remit earnings abroad.

#### **D. Malaysia's East Coast Economic Region Master Plan**

The East Coast Economic Region (ECER) covers the states of Kelantan, Terengganu, Pahang and the district of Mersing in the state of Johor. With a population of about 3.9 million people representing 14.5 percent of the total population of Malaysia, it has an area measuring over 66,000 square kilometers that covers more than half of Peninsular Malaysia.

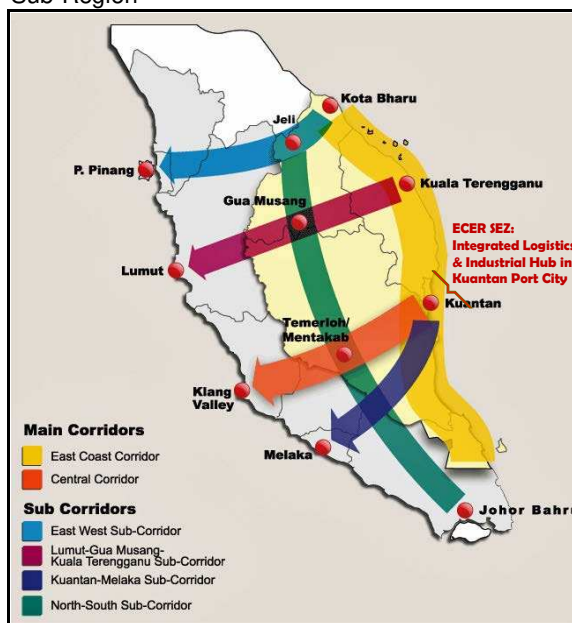
A Master Plan was developed to guide the development of the region through 2020. It aims to transform the region into a major international and local tourism destination, an exporter of

resource based and manufactured products, a trading center and an infrastructure and logistics hub. It also contains measures to eradicate poverty, raise incomes and improve income distribution in a sustainable manner. Focal clusters are tourism, oil and gas, manufacturing, agriculture and education.

In order to coordinate government authorities in carrying out the master plan, the East Coast Economic Region Development Council (ECERDC) was established in 2008 as a statutory body that consists of the prime minister, various government ministries and representatives from the private sector (Office of the Prime Minister of Malaysia, 2014).

An ECER Special Economic Zone (ECER SEZ) is being located at Gebeng Industrial Area near the Kuantan port in the state of Pahang (Figure 4.5). It was established in 2009 as a strategic initiative for a more focused investment approach. It is driven by a package of investment incentives (described in Section F below). By 2020, ECER is expected to implement projects worth an estimated US\$ 35 billion and create 220,000 new jobs of the total of 560,000 jobs identified under the ECER Master Plan. A One Stop Centre has also been established to further facilitate investment by providing a single point of contact for prospective investors to receive, process and expedite approvals by state and federal government agencies.

**Figure 4.5: ECER's Focus on Existing Corridors in the Sub-Region**



Source: ECERDC, "Master Plan". Available: <http://www.ecerdc.com.my/ecerdc/masterplan8.htm>.

## E. Malaysia's Northern Corridor Economic Region Program

The Northern Corridor Economic Region (NCER) development program is a Government initiative that aims to accelerate economic growth and raise income levels in northern Peninsular Malaysia.<sup>11</sup> The states that form the NCER are Perlis, Kedah, Pulau Pinang and northern Perak (districts of Hulu Perak, Kerian, Kuala Kangsar and Larut Matang–Selama). The NCER initiative, as laid out in the NCER blueprint, is being carried out between 2007 and 2025 over three distinct phases. Phase I (2007-2012) put in place priority infrastructure, identified potential investors and implemented several high impact projects in key economic sectors. Phase II (2013-2020) seeks to accelerate regional growth by broadening and deepening the private sector's role in economic development through the creation of a network of businesses, and the establishment of domestic and foreign business linkages to enable local companies to develop the capability to penetrate global markets. Phase III (2021-2025) aims to establish the region's targeted products and services as global industry leaders.

**Objectives:** The objectives of the NCER initiative include: (a) maximizing the region's economic potential; (b) closing development and income gaps between different regions in Malaysia; (c) moving towards higher value-added and knowledge-based economic activities in order to

<sup>11</sup> The material in this section draws from Malaysia Institute of Accountants, "B22 Northern Corridor Economic Region (NCER)". Online: [http://www.mia.org.my/new/downloads/circularsandresources/budget/2012/SECTION\\_B/B22.pdf](http://www.mia.org.my/new/downloads/circularsandresources/budget/2012/SECTION_B/B22.pdf).



increase per capita income; and (d) developing the region in targeted economic focus areas that emphasize local community involvements.

The two main themes of the NCER initiative are (a) increasing value-add from existing industries with emphasis in transforming and expanding the target economic focus areas (agriculture, manufacturing, tourism and logistics) in the region; and (b) a commitment to growth with social equity where programs accelerate growth in the target economic areas, with emphasis on local community involvement led by the private sector and driven by the market.

**Key economic focus areas:** The NCER has four targeted economic focus areas, namely, agriculture, manufacturing, tourism and logistics. These areas represent the region's existing industries that are to be further transformed and expanded under the NCER initiative. The following are the target outcomes for each area:

Focus Area	Targeted outcome
Agriculture	To become Malaysia's modern food zone and increase the country's efficiency in food production.
Manufacturing	To become the high-tech electronics hub and expand the current predominant assembly and test activities to higher value-add activities. To promote new industries – downstream agriculture, biotechnology, sustainable materials, and oil and gas.
Tourism	To position the NCER region as a premier destination for tourists seeking world-class resorts, spas and a destination for long-stay vacations. To become Asia's medical tourism hub which provides high quality and affordable specialist medical procedures.
Logistics	To become a major processing center and entrepot trade center. To promote Penang Port as a regional transshipment center.

For the area bordering Thailand, the NCER focuses on eco-tourism development in the northwest and on agricultural production and agro-based industrial processing in the north-central and northeastern parts of the sub-region (Figure 4.6).

#### Northern Corridor Implementation Authority (NCIA):

The task of implementing the NCER initiative is entrusted to the NCIA, which acts as the facilitator between the government and investors and perform certain functions on behalf of government agencies. The NCIA deals with the four NCER State Governments as well as working with the local authorities of Ministry of International Trade and Industry (MITI), Malaysian Industrial Development Authority (MIDA), Muda Agricultural Development Authority (MADA), customs authorities, Foreign Investment Committee (FIC) and others. It has been entrusted to manage a number of special-purpose funds that were created to provide financial assistance to entrepreneurs and companies involved in the NCER. The main objective of the funding schemes is to encourage the creation and the development of new and existing

companies involved in the promoted sector's activities in NCER. The funds serve to address the barriers to start a new business or expand an existing business.

**Figure 4.6:** NCER Focal Activities along Thai-Malaysian Border



Source: NCER, "NCER Blueprint". Available: <http://www.koridorutara.com.my/>.

## F. Malaysia's Investment and SEZ Incentives

### The Malaysia's Cross-Border Investment and SEZ Incentives

**NCER Incentives:** Financial incentives that are designed to encourage companies to undertake promoted activities in the NCER include soft loans, grants, venture capital funding, flexible land lease arrangements at the discretion of the State Governments and fiscal incentives.

- For the agricultural sector, there are two sets of funding and incentive packages: (a) NCER Agro-entrepreneur Incentive Package to enable trained and experienced agronomists to set up modern farming SMEs; (b) NCER Commercial Agriculture Incentive Package to encourage large corporations to undertake promoted agricultural activities.
- For the manufacturing sector, the NCER Manufacturing Industries Incentive Package is available to promoted zones in manufacturing sub-sectors in the NCER. The incentive package aims to encourage investments in new areas such as biotechnology and agribusiness, and encourage existing industries such as the electrical and electronic sector (E&E) to move up the value chain.
- The NCER Tourism Development Incentive Package includes fiscal incentives, provision of key infrastructure and waiver from meeting certain Government requirements.

Among the planned non-financial incentives are (a) waiver of the need to meet certain government requirements; (b) fast track the processing of licenses and work permits for Malaysian doctors returning from overseas and foreign medical expertise; and (c) assistance and incentives in obtaining international standards accreditation.

With so many different regional corridors and Special Economic Zones being developed all over the world, it is imperative for ECERDC to distinguish ECER from the rest. In this regard, investors would be pleased to know that ECER is offering an integrated package to them, comprising both fiscal and non-fiscal incentives. These incentives are specially tailored to investors who are venturing into the key ECER clusters namely tourism, oil, gas & petrochemical, manufacturing, agriculture and education.

**ECER Incentives:** In the ECER SEZ, a special package of fiscal and non-fiscal incentives is being made available in the focus areas for investments in manufacturing, petrochemicals, agro-based processing, tourism, knowledge, education and ICT. Four Free Zones are also being created in the ECER SEZ to promote and concentrate linkages amongst industry clusters which will have a significant impact on the economy. They consist of Kemaman Port-Free Zone, Kuantan Port City-Free Zone, Kuantan Airport-Free Zone and Tanjung Agas-Free Zone. In addition, a set of non-fiscal incentives is also being made available to encourage investors' participation in the ECER SEZ. Regulations to facilitate entry of an unlimited number of expatriate knowledge-workers for key management posts is part of the implementation strategy to develop and train a skilled workforce in the local population.

Fiscal incentives include:

- Income tax exemption of 100% for 10 years.
- Income tax exemption equivalent to qualifying capital expenditure incurred in 5 years
- Withholding tax exemption
- Stamp duty exemption
- Customized incentives based on merit of each case

Non-fiscal incentives are also granted by the respective State Governments to approved companies. They include discount rate for land premium, quit rent and land assessment, guaranteed land lease periods for a specific time period and flexibility in the employment of

expatriates. Investors can also benefit from the special flexibility in foreign exchange administration under Bank Negara Malaysia, exclusively granted for companies accorded with fiscal incentives.

To become an ECER Status Company, the firm needs to be a registered business entity which is either supported or approved by ECERDC to undertake approved projects and activities within ECER Malaysia.

In Kuantan Port City (KPC), where the SEZ is located, there are two types of Free Zones in the 485 designated area: (a) the Free Industrial Zone (FIZ), and (b) the Free Commercial Zone (FCZ). Activities and industries in the FIZ are subject to minimal custom formalities, while the FCZ status allows for the storage and deferment of import cargo.

- The KPC FIZ is designated for manufacturing activities, and investors can also be involved in value-added activities such as R&D, design, marketing, distribution, quality control, testing, labelling and packing.
- The KPC FCZ caters for commercial activities, which include trans-shipment, trading, regional distribution, inspection and sampling, value adding (for example, break bulking, re-milling, repacking, repackaging, grading, relabeling and transit) and retail trade.

Further details of the KPC incentive packages for the SEZ and specific activities in tourism, agriculture, manufacturing, and education are available at ECERDC (2014a; 2014b).

## **G. Target Industries**

There are considerable synergies in the Thai and Malaysian governments' target industries in the border area. For Thailand, the Government's current strategic plan incorporates into its vision the development of the southern border provinces as the production and processing base for rubber and oil palm, as a production center for halal food for export, and as a gateway to the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT).<sup>12</sup>

For Malaysia, both the Northern Corridor Economic Region (NCER) and East Coast Economic Region (ECER) place high priority on rubber and palm oil, as well as rice production. In the NCER, Out of the total 800,000 hectares of prime agricultural areas<sup>2</sup>, almost 42 percent is used for paddy, with approximately 49 percent for oil palm and 3 percent each for rubber and sugar cane (NCIA, 2014a). While oil palm land are owned and operated by large plantation companies, rubber is predominantly planted by smallholders. Crude palm oil production is largely absorbed by the oleochemicals and edible oil industries in Seberang Prai near to Penang, and palm oil upstream and downstream activities in the north are mature and well established. In contrast, the rubber industry as a whole is fragmented with many small players scattered close to rubber planting areas. The principal rubber products include Standard Malaysian Rubber (SMR) and latex concentrates, used primarily in the production of gloves, rubber threads, tires and tubes. In the ECER, agriculture is also the main economic sector and efforts are being made to direct activities in this sector towards high-technology agro-processing industries. The palm oil industry cluster (POIC) is one of the major industries in the area.

This section summarizes areas of possible cooperation among IMT-GT member countries for each of the targeted industries.

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<sup>12</sup> The material in this section on the Thai border region draws on a recent study conducted by the University of the Thai Chamber of Commerce and funded by the Ministry of Industry that examines specific industries and develops an implementation strategy of industrial cooperation for Thailand, Malaysia and Indonesia (Center for International Trade Studies, 2013).

## 1. Rubber and Its Products

**Importance of the Industry:** The IMT-GT countries account for over 70 percent of the world's total rubber plantation areas. Among these countries, Indonesia has the largest plantation area and Thailand is the world's largest natural rubber producer. Thailand focuses its activities in this industry on the production and export of latex and roasted rubber sheets, while both Indonesia and Malaysia concentrate their activities on the production and export of blocked rubber. Those products are shipped in their raw material forms to countries like China, Japan, United States and Europe to be processed into rubber products such as tires, industrial rubber goods, and consumer goods like footwear. Indonesia and Malaysia have set out as one of their major objectives to increase pre-export processing of their natural rubber in order to increase their value added in the industry. While Thailand would like to increase downstream activities, it currently only produces upstream and mid-stream rubber products.

**Figure 4.7:** The IMT-GT Countries Account for over 70% of the World's Rubber Production



Source: Photo by authors.

**Rubber City:** In 2013 Malaysia and Thailand agreed to cooperate on a so-called Rubber City project to enhance rubber trade and the linkages between two countries. Malaysia has identified Kota Putra in the border state of Kedah as the rubber city. Thailand is in the process of deciding whether to establish the rubber city in the Ban Prakob border crossing of Na Thawi district in Songkhla province, or in the Southern Industrial Estate in Chalung sub-district of Hat Yai district in Songkhla (Figure 4.7). The creation of a Thai-Malaysian joint venture could substantially enhance their global market shares of dry rubber and latex products.

## 2. Rubber Wood and Its Products

**Importance of the Industry:** The rubberwood industry is important to all three IMT-GT member countries. Thailand produces and exports sawn rubberwood, fiberboard and particle board, about two-thirds of which is directed to external markets, mainly to China. Malaysia mainly concentrates on downstream activities to produce furniture and housewares as one of the country's major exports (Malaysia Investment Development Authority, 2014). However, it lacks sufficient raw materials to support its expansion plans for the industry since there are limitations on rubber plantations in order to grow its oil palm industry (Ratnasingam, J., et al., 2012). Indonesia also concentrates its activities on the furniture industry and is one of the world's largest exporters of wood furniture. There is, nevertheless, a high degree of competition in the global furniture market and collaboration among the IMT-GT countries could strengthen their international competitiveness.



**Potential Cooperation:** Collaboration has been proposed in terms of complementary production activities, joint international marketing, and furniture design knowledge sharing and knowhow (Center for International Trade Studies, 2013). Malaysia could benefit from Thailand's raw material from the rubberwood industry to support its furniture industry. Although Indonesia has large rubber plantation areas, workers lack skills in timber processing and they could benefit from transfer of skills from Thai producers through either investment or business development centers aimed at improving skills. Collaboration in marketing of processed rubber woods and products would provide scale economies for the industries in each country and improve the ability of Indonesia, Malaysia and Thailand to compete in the market. Similarly, the establishment of a center for the development of rubber timber production and rubber products design could strengthen the capacity of producers, especially SMEs, to meet the changing preference of consumers in the major markets Asia, Europe and North America. Malaysia is currently developing its Rubber City in Kota Putra in Kedah State, while Thailand's rubber city will either be located in Na Thawi district or Hat Yai district of Songkhla province (Figure 4.8).

**Figure 4.8:** Proposed Rubber City Location in Malaysia and Two Options in Songkhla Province of Southern Thailand



Source: Based on information from the Center for International Trade Studies (2013).

### 3. Palm Oil

**Importance of the Industry:** The IMT-GT member countries are the three top palm oil producers in the world. Indonesia and Malaysia together account for 60 percent of the world's total palm oil plantation area. Their industries encompass the entire supply chain through well-managed integrated production systems. Malaysia has been in the forefront on product development in the areas of cosmetics, health foods and other high-growth markets. Thailand's industry is dominated by smallholders and, like Indonesia and Malaysia, it has been issued supply certified sustainable palm oil (SCPO) certification, which provides an opportunity for greater market penetration. In addition to production of palm oil based cosmetics and other high-growth consumer goods,

**Figure 4.9:** Cooperation among IMT-GT Countries Would Boost the Competitiveness of their Seafood Processing Industries



Source: Photo by authors.

Thailand's palm oil is processed into biodiesel as a crude oil alternative and efforts to support climate protection measures (GIZ, 2012).

**Opportunities for Cooperation:** Collaboration in the palm oil industry has been proposed in the form of a “Joint Development for Production Chain of Palm Oil Industry” scheme that would help to transfer knowledge of the industry among IMT-GT member countries (Center for International Trade Studies, 2013). For Thailand, the program would support improvements in the quality of its seeds and integration of those seeds into production areas, similar to the way that has been developed in Malaysia. It would also help Thailand to improve its low oil extraction rate (OER) and revamp its plantation management system to increase the industry's efficiency. The program would support cross-

border investments, in particular, would establish integrated supply chain management and distribution systems across the IMT-GT member countries, including the production of biodiesels.

#### 4. Canned Seafood and Seafood Processing

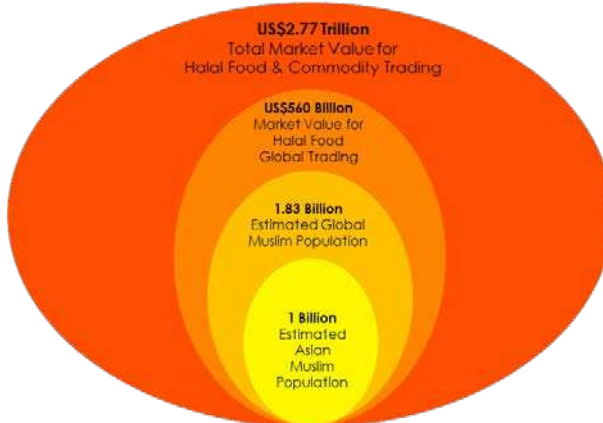
**Importance of the Industry:** The seafood processing industry is important to all IMT-GT member countries and are well established in each country. In Thailand, however, the industry faces shortages in fish supplies. The main seafood products are canned tuna, sardines, crabs, shrimps, cuttlefish, and frozen shrimps, cuttlefish and fish. In addition, there is production of fish-related products like shrimp bread, crabsticks and tuna products. Most of factories in the sector are large scale since they require extensive capital investments and a large labor forces. The factories are mainly located in Songkla, Suratnane and Pattani where the majority of open sea fishing and fish farming takes place. The main markets for frozen foods are Japan, the United States and the European Union.

**Opportunities for Cooperation:** Collaboration among IMT-GT member countries would provide for a mechanism to support complementary activities and scale economies. Thailand, for example, has a high degree of expertise in the processing industry which is lacking in Indonesia, while Indonesia and Malaysia have fish supplies that are lacking in Thailand. Malaysia is a leader in halal foods and development of an ASEAN branding seafood label could boost sales worldwide and help market seafood products in emerging markets (Figure 4.9).

#### 5. Halal Food Industry

**Importance of the Industry:** Malaysia, Indonesia, Thailand and China are the world's leading exporters of halal foods. In 2004 Malaysia introduced a halal standard for food and non-food products that has ensured its leadership in the global market since the Malaysia Halal Certificate is one of the most sought after certificates by halal producers worldwide. Global demand growth for halal products, however, is outstripping that of supply and new suppliers are needed to fill the growing supply deficit in market valued at US\$ 2.77 trillion (Figure 4.10). While Thailand is a leading agro-food processor, it has yet to take advantage of the fast-growing halal market. It has, nevertheless, established bilateral trading relations in halal foods with Muslim Middle East countries and non-Muslim countries that want high quality and safety standards. China and Indonesia have also expanded its halal industry in the last few years and, together with Thailand, these countries pose a major competitive challenge to the Malaysia producers that tend to have considerably higher production costs (Bohari, Hin and Fuad, 2013).

**Figure 4.10: The Global Halal Market**



Source: Dagang Halal Forum at <http://forum.daganghalal.com/topic86-you-lose-60-market-share-without-halal-cert.aspx>.

### **Opportunities for Cooperation:**

Collaboration opportunities for Malaysia, Thailand and Indonesia have been explored in considerable detail (see, for example, Halal Industry Development Corporation, 2010). Essentially, it involves the development of a joint development plan under the IMT-GT umbrella to create a subregional halal hub where member countries would complement each other in the halal hub's value chain. Under this strategy, the three countries would work together to share knowledge and experiences in the industry, implement joint training and education systems, and ensure the integrity of halal production.

Under the NCER blueprint, the halal industry is to be expanded to enable high-value

products to be exported to the IMT-GT region and the Middle East. Halal processing centers for meat exports are to be created in Padang Besar as well as Sg Petani and Tasik Gelugor. In the ECER, (Figure 4.10) there are several halal parks. Pasir Mas Halal Park, in particular, is located on the Malaysian side of the border crossing between Kota Baru in Thailand and Rantau Panjang in Malaysia. It is being developed on a 55 hectare site with a central marketing and processing complex that manufactures food-based products and an incubator center for micro-enterprises that produce traditional and specialty foods. The center concentrates on the production of additives and ingredients that have applications ranging from food additives to material inputs for the pharmaceutical industry and health care sector. Its close proximity to the Thai border offers an opportunity for close synergies between the industries that are located in Narathiwat and other southern provinces. Thai businesses operating under joint ventures with companies in the Pasir Mas Halal Park can take advantage of its Halmas status, which is an accreditation given to halal park operators who have successfully complied with the requirements and guidelines stipulated under the HDC designated Halal Park Development. It is also a mark of excellence for parks that produce high quality halal products. With that accreditation, companies in the park can receive incentives given by the Malaysian authorities (Ministry of International Trade and Industry, 2013). Another project within the ECER is the Gambang Halal Park is a manufacturing project for value-added industry development of food and non-food products produced in accordance with Sharia principles, and with incubation centers for small and micro-food enterprises. It is located about 30 kilometers from the Pahang state capital of Kuantan.

**Figure 4.11: Pasir Mas Halal Park, near the Kota Baru (Thailand) and Rantau Panjang (Malaysia) Border Crossing.**



Source: Photo by authors.

### **PART III. ASSESSMENT OF EACH BORDER CROSSING**



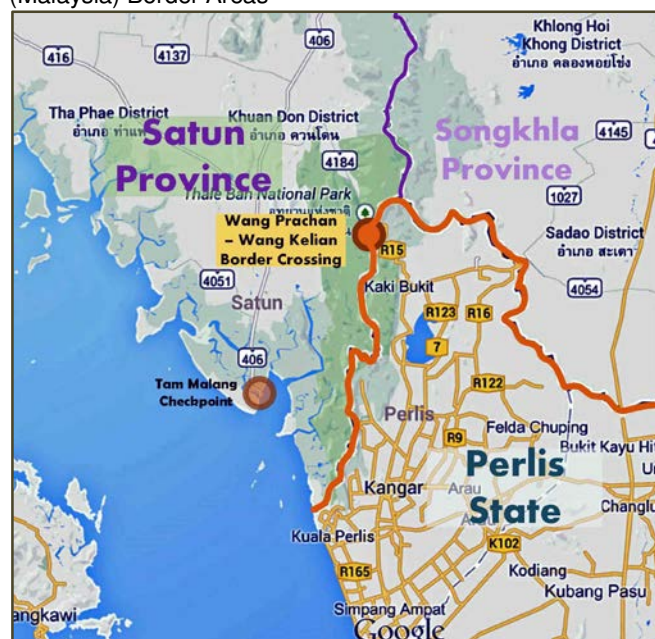
## V. SATUN – PERLIS BORDER CROSSING

### A. Profiles and Development Strategies

#### 1. Geographic and Demographic Profiles

**Satun Province (Thailand):** Satun province is located on the western end of the southern border provinces, adjacent to the Andaman Sea, the state of Perlis, Malaysia, to the south and Songkhla province of Thailand to the east, and Trang province to the north. It has a major reserved forest, fertile mangroves and world renowned marine ecotourism. The coastal area is suitable for deep water fishery operation, including marine aquaculture. To the south, the Sankarakhiri mountain range provides a natural divide between Thailand and Malaysia. Satun has a majority Muslim population (67.8 percent are Muslim and 31.9 percent are Buddhists). Unlike the other Muslim-majority provinces of Narathiwat, Yala and Pattani in the southeast provinces of Thailand, Satun does not have a history of political confrontation with the central power in Bangkok or of tension with the Buddhist population within the province.

**Figure 5.1:** Satun Province (Thailand) and Perlis State (Malaysia) Border Areas



Source: Map by Google, modified by authors.

**Perlis State (Malaysia):** Perlis is the smallest state in Malaysia, with an area of 810 square kilometers. It lies in the northern part of the west coast of Peninsular Malaysia, with Thailand's Satun and Songkhla provinces on its northern border and the state of Kedah to the south. Its economic activities are diversified among agriculture, fishes, forestry, manufacturing and tourism. The border town of Padang Besar shares the same name as the town on the Thai side of the border. The state's population of 227,000 is about 80 percent Malay, 10 percent Chinese and 10 percent other. The population is largely Muslim (88 percent) and, to a lesser extent, Buddhist (10 percent), with the remainder divided among Christians, Taoists, Hindus and other religions.

#### 2. Provincial and State Development Strategies

There are complementarities in the development strategies being carried out in Perlis state and Satun province that have potential synergies and opportunities for cooperation in their implementation. Both are interested in collaborating in the further commercial development of the common border area that extends one kilometer on either side of the border as a means of promoting local commerce and attracting visitors to nearby eco-tourism sites.

In both sides of the border, small and medium size enterprises (SMEs) have strong networks and are supported by local and regional authorities. In Satun the banking sector provides relatively soft loans to SMEs and Islamic banking facilities are available. For business development, however, most entrepreneurs depend on the learning institutions in Songkhla. In the recent past, businesses have depended largely on strong networking relations with one another, with

investments financed by banks and little direct intervention on the part of the public sector (Andriess, 2007).

**Satun Province:** In Satun province of Thailand, the provincial government's vision under its 2015-2018 development plan is the creation of a leading eco-tourism site in the south of Thailand with secure economic and quality society. In that context, public expenditures are targeting infrastructural development to support ecotourism, as well as the agricultural and aquaculture sectors. Major public projects for 2015-2018 include (a) construction of Wang Prachan Customs; (b) construction and renovation of local fishery coastal port; (c) administrative management of one-stop rubber production; (d) development and increase Halal potential; (e) improvements of ecotourism attractions and certifications of those places; (f) mangrove reforestation and

development of mangrove and forest joint to restore and maintain biodiversity; and (g) construction of bypasses around the towns of Chalung and Thung Wa.

**Perlis State:** In Perlis State of Malaysia, the Strategic Development Plan for 2012-2030 has established as its vision the transformation of the state into an urbanized and high income area based on the implementation of 64 projects in the areas of agri-foods, manufacturing, trading and services, tourism, education and urban development (NCIA, 2013). Its Border Economic Transformation Program seeks to create opportunities for local traders and communities to

improve retail and tourism offerings as a means of attracting more people to the area and ensuring that they stay for a longer period of time (NCIA, 2014b). Among the planned activities are the building of a low-rise shopping center that will integrate into the natural environment in the area, improvements in the variety and quality of products sold in the market, installation of food and beverage facilities, and promotion of visits to the nearby attractions that include Perlis State Park (2 kilometers from border), Gua Wang Burma caves (3-4 kilometers from border), and Bukit Pelarit town (12 kilometers from border).

**Figure 5.2:** Wang Prachan Border Checkpoint in Thailand



Source: Photo by authors.

**Figure 5.3:** Wang Kelian Border Checkpoint in Malaysia



Source: Photo by authors.



## B. Wang Prachan – Wang Kelian Border Crossing Area

### 1. Cross-Border Trade

Wang Prachan (Satun Province, Thailand) and Wang Kelian (Perlis State, Malaysia) have a free trade area on both sides of the border. Since December 2008 there has been a one kilometer visa-free access on either side of the border crossing for visitors to the bazaar. Its market for local products is well known and enjoys particularly large attendance on Sundays (Figure 5-4). The area has the potential to be developed as competitive tourism center rather than being limited to a tourism transit point. But the right promotional activities to market these assets need to be initiated.

Cross-border trade is largely limited to Thai imports from Malaysia, which has been growing by an average of 5 percent a year since 2010. Just over one-half of those imports are in the form of palm oil pressing machine parts (Figure 5.5).

### 2. Transport and Logistics

There is a customs land-link to Malaysia at Wang Prachan as well as a seaport link at Tammalang with the island of Langkawi in Malaysia. The Wang Prachan customs office includes a one stop service management system for integrated services.

There are plans to construct better CIQ facilities and roads at the Wang Prachan border to support a larger volume of trade and tourism. But the extent to which those plans are implemented will depend on whether a tunnel is constructed through the mountain linking Thailand to Malaysia.

**Figure 5.4:** Wang Prachan – Wang Kelian Border Area



Source: Photo by authors.

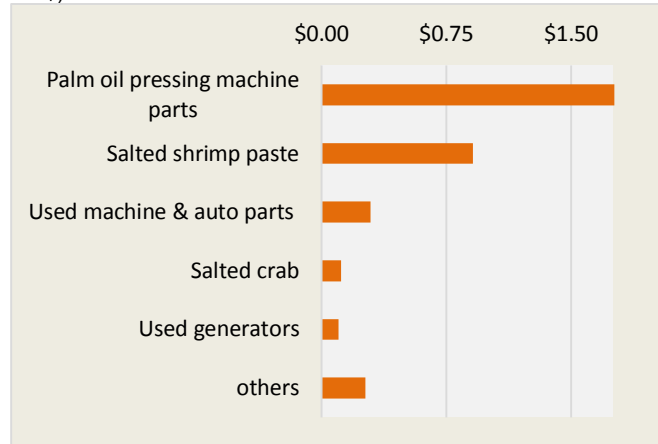
### 3. Value Chains

The rubber industry is largely limited to the extraction of latex from the rubber trees. However, the fishery industry has a relatively well developed cluster of fishermen (partly from Myanmar), boat owners, cold storage firms, ice factories and, in Satun province, a large fish canning factory at Siam Tin Foods that employs more than 1000 workers.

### 4. SBEZ Potential

At present the border area lacks the kind of product quality and parking capacity to handle a large number of tourists arriving by car or buses. Nor are there special events to draw tourists, despite the area's favorable eco-tourism attractions, pleasant weather and popular local culinary products. In fact, recent data suggests that this problem has resulted in a severe decline in the number of visitors to the site (NCIA, 2014b). A commercial SEZ would support the large local border market and thereby strengthen the Government's plan to enhance tourism in the area. On the Malaysia side, there are plans to develop a Wang Kelian tourism town with a CIQ complex with institutional use, especially for safety, security, administration and staff housing for public servants. In addition there will be a bazaar, shopping arcade, budget hotels, food court, residential houses and local service centers (NCIA, 2014b).

**Figure 5.5:** Major Thai Imports from Malaysia at Wang Prachan – Wang Prachan Border Crossing, 2013 (Million US\$)



Source: Thai Customs Authorities.

At present, there are limited opportunities for the development of an industrial SEZ in the area that would support cross-border trade and investment between Thailand and Malaysia and extend to Indonesia and other countries. However, eventual construction of a tunnel linking Thailand to Malaysia through Wang Prachan would greatly improve prospects for the successful development of an SEZ along the border. The SEZ could transform the local area market to a world class commercial center that included an enhanced free customs and warehousing zones, free ports, and especially a free trade area (FTA) to complement and enhance the current free trade zone for the border market. The zone could be modeled after the successful Lao Bao commercial SEZ on the Lao PDR-Vietnam border along the East-West Economic Corridor (EWEC) of the Greater Mekong Subregion (GMS). The Lao Bao model is an integrated economic zone with characteristics of an industrial park, an export processing zone, a border gate economic zone and a special tax-free zone (Vietnam Trade Promotion Agency, 2013).



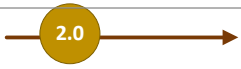
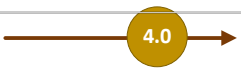

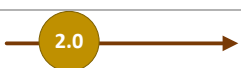
### 5. Links to Indonesia

There are opportunities for Indonesian investments in the fishery and rubber industries. These two industries are well established in Indonesia and there is therefore considerable knowledge about the industry in that country. Fishing vessels from Indonesia already use the port facilities in the Tam Malang and an SBEZ might draw more vessels to supply the fisheries industries.

## 6. Ratings

The strongest motivations for developing an SBEZ in the Wang Prachan – Wang Kelian area is based on the relatively low per capita income of the population and the need to develop and upgrade the capacity of SMEs. There is already a well-planned integrated development strategy for the area on the Malaysian side that has been put forward by the East Coast Economic Region Development Council. In fact, the visa-free zone is already regarded as being at a Level 1 stage of the SBEZ roadmap discussed in Section 2.C above, and there is interest on the parts of the Satun Province and Perlis State to informally or formally collaborate in advancing the level of collaboration to the next stage of integrated SBEZ development. However, much of the potential for developing the SBEZ depends on the construction of a tunnel linking Malaysia and Thailand at the Wang Prachan border, as well as the improvements in transport and infrastructure. Figure 5.6 summarizes the strengths and drawbacks of an SBEZ in the area and assigns ratings for each evaluation component based on a scale of 1 (low) to 5 (high).

**Figure 5.6: SBEZ Assessment of Wang Prachan – Wang Kelian Border Crossing Area**

Ratings	Strengths	Drawbacks
Special Economic Zone	Existing SEZ is already at Level 1 stage of SBEZ roadmap, and there is interest on both sides of the border to progress to Level 2 stage.	Lack of quality products and adequate infrastructure.
	Border area could become world class commercial center.	Commercialization could undermine ecotourism in area.
1 2 3 4 5	Commercial SEZ would strengthen tourism .	Integrated commercial and industrial SEZ requires large infrastructural upgrading.
Value Chains	Fisheries industry is relatively well-developed cluster.	Fishery industry could compete with large and world-famous aqua tourism industry.
	Large canning factory already exists and could draw more investment.	Factories could be environmentally unfriendly to ecotourism activities.
1 2 3 4 5	Natural rubber industry's latex production could attract downstream activity on both sides of border.	Natural rubber industry is currently limited to production of latex.
Transport & Logistics	Tunnel would greatly enhance trade and transport opportunities.	Funding for tunnel remains uncertain.
	New CIQ center will increase efficiency and promote commerce.	Benefits from CIQ will depend on construction of tunnel.
1 2 3 4 5	Road improvements would attract more commerce.	Benefits of road improvements would need to be supported by tunnel construction.
Socio-Econ Development	SBEZ would help to improve incomes and welfare of local population.	Limited interest to develop industrial activities that could undermine ecotourism.
	SBEZ would support skills development of local population.	Lack of existing knowledge centers in province.
1 2 3 4 5	Border town development planning offers integrated development approach.	Progress is hampered by lack of adequate technical and financial support.
SME Development & BDS	SMEs are well organized and have strong networking system.	BDS centers are concentrated in neighboring Songkhla province.
	Strong existing banking relations with private sector.	Banking sector might not support BDS funding and credit guarantee facility.
1 2 3 4 5	BDS center could greatly improve SME opportunities.	Sustainability of BDS need support by SME contributions to center.
Linkages to Indonesia	Links with fisheries industries already exist.	Fishing vessels use Tam Malang border checkpoint.
	Opportunities for Indonesian investors in fishery and rubber industry.	Larger Indonesian investors are outside of subregion in Sumatra.
1 2 3 4 5	Opportunities for Indonesian workforce to support fishery and rubber industries.	Limited existing opportunities for Indonesian workers in province.



## VI. SONGKHLA – PERLIS AND KEDAH BORDER CROSSINGS

### A. Profiles and Development Strategies

#### 1. Geographic and Demographic Profile

**Songkhla Province:** The province is bordered in the south by the Malaysian states of Kedah and Perlis. Elsewhere, Songkhla borders on the north with Nakhon Si Thammarat and Phatthalung provinces; in the east, with Yala and Pattani provinces and the Gulf of Thailand; and, in the west, with Satun province. Its border with Malaysia extends across 210 kilometers and has three checkpoints: (a) Padang Besar; (b) Sadao – Bukit Kay Hitam; and (c) Ban Prakob – Durian Burung (Figure 6.1).

As the southern province with the most commercial and industrial activity, Songkhla province has the largest population and GPP in the region. Its per capita income is twice as high as that of Narathiwat, and it is one-fourth more than that of either Satun or Yala provinces.

**Figure 6.1:** Songkhla Province (Thailand) and Perlis and Kedah States (Malaysia) Border Area



Source: Map by Google, modified by authors.

**Kedah State:** The state borders the provinces of Songkhla and Yala to the north, Kedah state to the west, Perak to the south and Penang to the southwest. It has land area of 9,426 square kilometers and a population of just over 2.0 million. Kedah's population is somewhat less than that of Perak, the border state with the highest number of people, and its per capita income of US\$ 5,410 is also the second highest among those states. The population is composed of 76 percent Malay, 13 percent Chinese, 7 percent Indians, and 4 percent others.

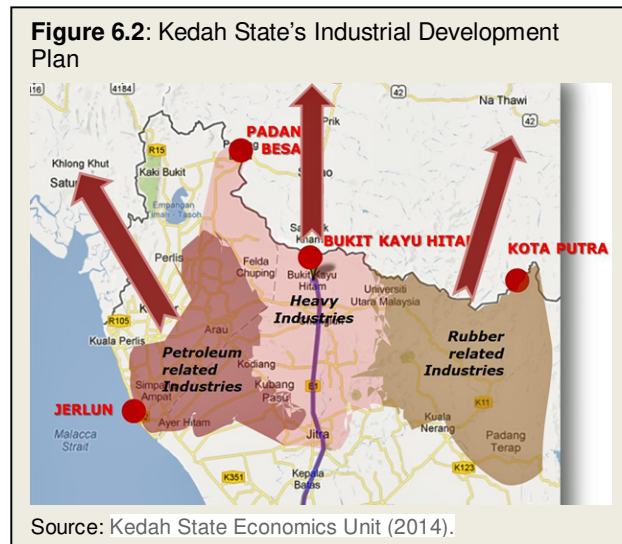
**Perlis State:** The Malaysian and Thai towns at the border crossing are known by the same name of Padang Besar. In addition to the road crossing, there is a railroad line that connects Thailand's main southern line to Bangkok to Malaysia's West Coast trunk line. Both Malaysian and Thai customs, immigration and quarantine formalities are conducted at Malaysia's Padang Besar railway station.<sup>13</sup>

#### 2. Socio-Economic Development

**Songkhla Province:** The Government's strategic objectives include broad-based growth objectives that reflect the multi-sector productive based of the area, namely, agriculture, industry, trade and investment, tourism and other services. Among the key projects targeted under the 2015-2018 development plan are (a) the expansion of the Sadao customs area; (b) the development of the customs and logistics center at Ban Prakob; (c) the expansion of the Hat Yai – Sadao motorway to accommodate more traffic; (d) the development of the Rubber city on Southern Industrial estate at Chalui; (e) the construction of a double-track railway system through

<sup>13</sup> For details of the demographics and development strategy of Perlis State, see Section V.A above.

Surat Thani – Hat Yai and through Hat Yai – Su-ngai Kolok; (f) establishment of a trucking terminal at the Sadao border crossing; and (g) development of city plans.



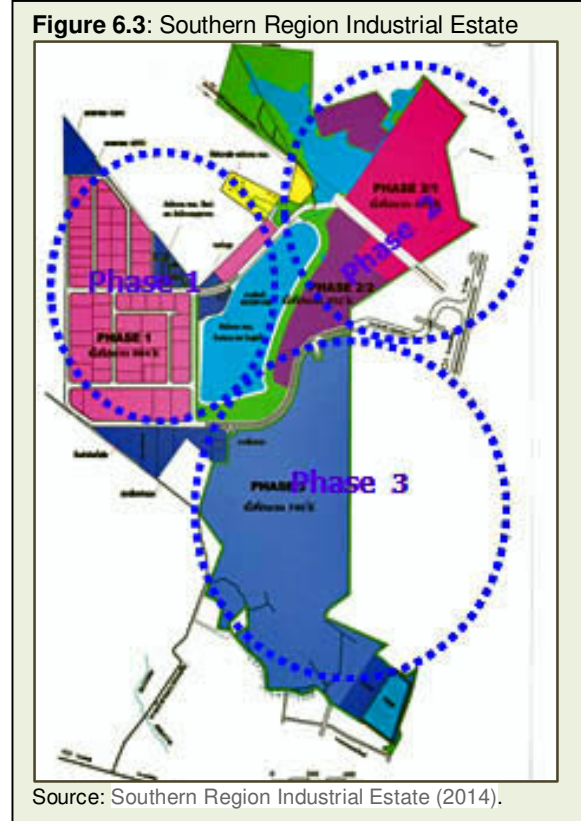
The province has a number of higher educational institutions that offer business development services. They include Prince of Songkhla University, Taksin University, and Songkhla Rajabhat University. There are also a number of important research institutions, including the Prince of Songkhla University that includes the Halal Food Research Group within the Faculty of Agro-Industry. It provides a platform for research and development as well as Halal business development in southern Thailand.

While the Government's Emergency Decree under the Internal Security Act is mainly in force in the provinces of Pattani, Yala and Narathiwat, it also applies to some parts of Songkhla.

**Kedah State:** The state's development goals for 2016-2020 are to build infrastructure, strengthen economic growth and improve the welfare of the people. Its gateways to Thailand are being designed to support the development of heavy industries in the Bukit Kay Hitam border area as well as that in Padang Besar in Perlis State, and for rubber-related industries in the Durian Burung area (Figure 6.2). Much of the state's budget for development projects are currently being directed to the industrial hub Bukit Kayu Hitam, which is discussed more fully in Section VI.B below, and the Rubber City at Kota Putra, described in Section VI.D below.

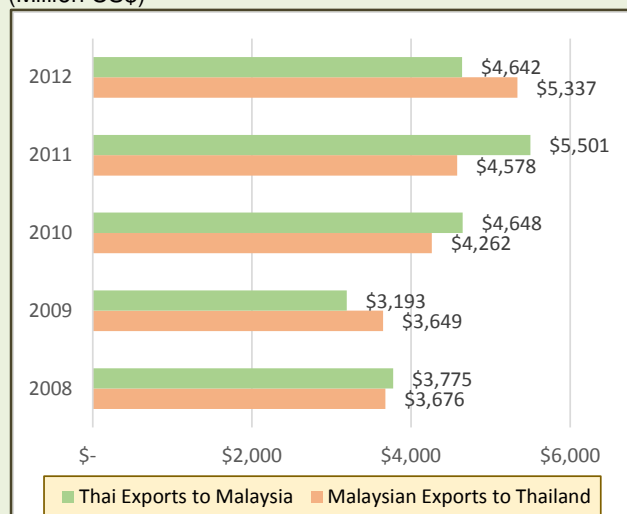
### 3. Southern Region Industrial Estate

The province of Songkhla contains the Southern Regional Industrial Estate (SRIE), which is considered to be the second best industrial estate in Thailand after the Northern Regional Industrial Estate in Lampoon, near Chiang Mai. The SRIE was established in 1994 as a combination of a free zone and an industrial zone. As mentioned earlier in Section II.C, it is being considered for the location of the Rubber City. At present, there is a Thai-Malaysian joint venture in a warehousing facility. The free zone currently contains companies in the following industries: automotive parts, condoms, palm oil, fireworks, warehousing, roof infrastructure, consumer products, and digital billboards. The industrial zone has companies operating in industries related to gypsum, rubber gaskets, water tanks, waste management toxins, light bricks, fireworks, waste recycling, structural



beams, and wood processing for particle board. It also includes latex collection and processing for Michelin.

**Figure 6.4: Sadao – Bukit Kayu Hitam Cross-Border Trade (Million US\$)**



Source: Department of Foreign Trade, Ministry of Commerce, Royal Thai Government; and Royal Malaysian Customs.

**Figure 6.5: Major Traded Products at Sadao and Padang Besar Border Crossings in Songkhla Province, 2012 (%)**

	Origin of Imports	Destination of Exports
Malaysia	70.8%	76.1%
Singapore	27.8%	7.1%
China	0.0%	7.0%
USA	0.1%	3.7%
Japan	0.0%	4.1%
Brazil	0.0%	0.9%
India	0.0%	0.2%
Emerites	0.1%	0.2%
Other	1.2%	0.7%
Total	100.0%	100.0%

Source: Based on data from Department of Foreign Trade, Ministry of Commerce, Royal Thai Government; and Royal Malaysian Customs.

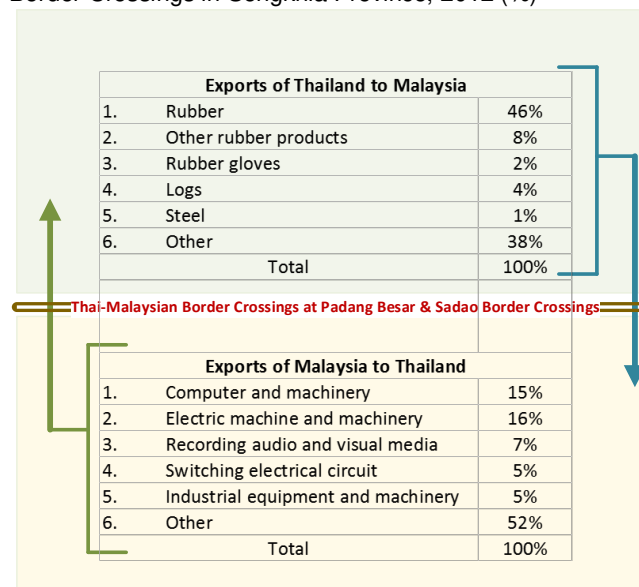
The SRIE covers 360 hectares and is being developed in three phases (Figure 6.3): Phase I (completed) covers 139 hectares and contains the currently operating companies described above; Phase II covers 100 hectares and is divided into two parts, one of which has been purchased by Michelin accounting for 40 percent of the total. Phase III covers 121 hectares and is yet to be developed. It has been nominated to be the location for the Rubber City and, if selected, it would be completed by 2018.

## B. Sadao – Bukit Kayu Hitam Border Crossing Area

### 1. Cross-Border Trade

The total value of cross-border trade (imports plus exports) at the Sadao – Bukit Kayu Hitam border crossing totaled over US\$10 million in 2012. For Thailand, that amount represented the largest value of trade across any of its border crossings. Malaysian exports to Thailand in the last five years have been about the same as Thai exports to Malaysia, although the relative size of those movements have varied from year to year (Figure 6.4).

**Figure 6.6: Major Traded Products at Sadao and Padang Besar Border Crossings in Songkhla Province, 2012 (%)**



Source: Based on data from Department of Foreign Trade, Ministry of Commerce, Royal Thai Government; and Royal Malaysian Customs



Rubber export account for 46 percent of Thai exports through the Sadao checkpoint as well as that of Padang Besar, while Malaysian exports of computer and electronic machinery accounted for over 30 percent of the total (Figure 6.5). Those exports mostly originated from Malaysia and Singapore (over 98 percent of the total), whereas from Thailand exports were somewhat more diversified to Malaysia, Singapore, China, the United States and Japan (Figure 6.6).

## 2. Transport and Logistics

In 2012, 340,000 trucks that passed through the Sadao – Bukit Kayu Hitam border crossing (about half arrivals and the other half departures either way). There were also 4.3 million pedestrians that passed through the border in that year, and that figure was up by more than 12 percent during the first 9 months of 2013.

**Thai CIQ Facility:** The Sadao customs office includes a one-stop service management system for integrated services. For imports, the facility provides (a) car manifest through e-import; (b) a dedicated import approval channel for cars and trucks; (c) tax collection and an inspection and discharge port; and (d) an X-ray procedures of 10 minutes per container. For exports, the facility provides (a) a container cargo loading area; (b) X-ray procedures similar to those for imports; and (c) exporting truck discharge at checking point. The road leading to the complex and the complex itself are highly congested and, on weekends, there are long lines of traffic waiting to be processed

**Figure 6.7:** Actual Customs Facilities at Sadao Border Crossing



Source Photos by customs authorities at Sadao.

**Figure 6.8:** Proposed Expansion of Sadao ICQ Complex

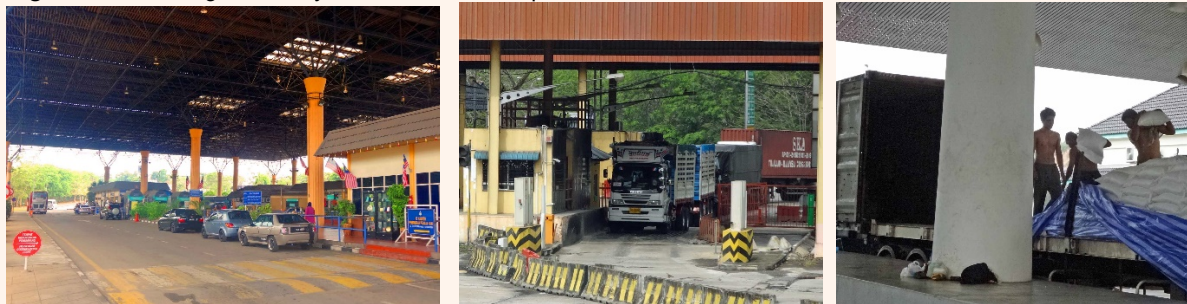


Source Photos by customs authorities at Sadao.

(Figures 6.7). To help alleviate this congestion, the complex is being extended east to provide a waiting area for outgoing trucks (Figure 6.8).

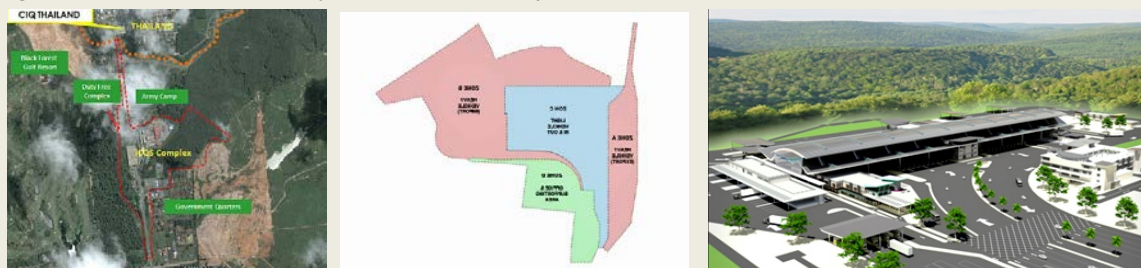
**Malaysian ICQS Facility:** The integrated customs, quarantine and security (ICQS) complex at Bukit Kayu Hitam is currently being expanded from 10.4 hectares to nearly 30 hectares. At present, its facilities are limited in terms of both operational area and quality of infrastructure (Figures 6.9). The new complex will begin construction in the 3<sup>rd</sup> quarter of 2014 and it will be completed in 2017 (Figure 6.10). Since the existing site will form part of the larger complex, the first phase of the project will develop the area outside the existing site and, once completed, the existing site will be developed while operations get underway in the new area of the complex (Northern Gateway, 2014).

**Figure 6.9:** Existing Bukit Kayu Hitam ICQS Complex



Source Photos by authors.

**Figure 6.10:** Planned Bukit Kayu Hitam ICQS Complex



Source: Northern Gateway (2014a).

Malaysia's North-South Expressway connects Bukit Kayu Hitam to Alor Star, the capital of Kedah Sate, and to other major cities and ports in Thailand and in Peninsular Malaysia (Figure 6.10). On the Thai side of the border, the road connects Sadao to Hat Yai city and continues north to Bangkok. Despite its heavy use, the road north suffers from congestion in many parts. Moreover, as shown in the third photo of Figure 6.9 above, cargo usually needs to be transferred from the truck registered in one country to another one that's registered in the other country. There is no bilateral transport agreement to allow movement of vehicles between Malaysia and Thailand. All vehicles involved in commercial transport have to be registered and insured locally by a local operator. Malaysian domestic legislation also states that transport enterprises in Malaysia can only be established by Malaysia nationals. An exception is made for the transport of perishable goods from Thailand to Singapore through Malaysia. In this case, double registration is allowed for a limited number of vehicles on pre-specified routes (UNESCAP, 2012).

### 3. Kota Perdana Industrial Zone

The Kota Perdana Industrial Zone being established in Bukit Kayu Hitam is part of the Kubang Pasu District's local plan to create a growth area driven by a large variety of heavy industries. It



consists of a free industrial zone, a free trade zone, a logistics and distribution center, and large-scale commercial residential facilities (Northern Gateway, 2014b).

The area will eventually flank both sides of the North-South Expressway at Bukit Kayu Hitam and cover an area of 1862 hectares currently owned by Northern Gateway, of which nearly 1620 hectares are non-Malay reserve land that can be foreign individuals or entities. Zone 1, to the east of the North-South Expressway, is designated as the Kota Perdana Industrial Hub (Figure 6.12). The northwest area of Zone 1, identified as Parcel A, is next to the ICQS and has great potential as a logistics center, free trade zone, and a storage and distribution center. Zone 2 will be developed as an industrial zone and mixed development area, based on a master plan that is currently being prepared.

An area of 51 hectares adjacent to the industrial hub is zoned for commercial use and will be the location of the new town center for Bukit Kayu Hitam being planned by local authorities. That border town is being constructed under the umbrella of the Joint Development Strategy (JDS) for Malaysia and Thailand, whereby town development is paired with the town on the other side of the border in order to address cross-border social and economic issues, security, movement of people and goods, and general strategic development issues.

**Figure 6.11:** Kedah's North-South Expressway to Bukit Kayu Hitam



Source: Northern Gateway (2014b).

**Figure 6.12:** Site of Kota Perdana Industrial Hub

Site for Industrial Hub:









Site for New Border Town:



Source Photos by authors.



**Figure 6.13: SBEZ Assessment for Sadao Border-Crossing Area**

Ratings	Strengths	Drawbacks
Special Economic Zone	On Malaysian side, Kota Perdana Industrial Zone offers well-planned integrated SBEZ approach to industrial development.	On Thai side, high congestion inhibits industrial development and upgrading of transport and logistic facilities.
	Potential for first phase of Kota Perdana Industrial Zone to provide logistics center, storage and distribution center, and free trade zone next to new ICQS.	Congestion of area around border would limit opportunities for support industries .
1 2 3 4 5	Relatively high levels of skilled workers in area and access to material inputs.	Possible sensitivity from inhabitants to development of SBEZ industries.
Value Chains	Rubber industry cooperation is well advanced.	Better opportunities for cooperation could be developed in neighboring provinces.
	Opportunities to expand rubber wood industry to downstream industries.	Downstream industries such as furniture are highly competitive in global market.
1 2 3 4 5	Cooperation in palm oil industry with Malaysia could improve integrated production system management.	Considerable work needs to be done to improve oil extraction rates and improve the industry's competitiveness.
Transport & Logistics	Well-established route servicing largest cross-border trade in Thailand	Heavily congested area with little, if any, possibility of widening road near border.
	Expanded ICQ facilities on both sides of border, especially Malaysian side.	Newer and larger CIQ and transport infrastructure in nearby Padang Besar.
1 2 3 4 5	Common control area with Malaysia planned for 2015.	On Thai side, budget constraints could delay implementation.
Socio-Econ Development	On Malaysian side, well-integrated border town plans and links to learning centers.	Population of province has the highest per capita GPP in the Southern Region.
	SBEZ could help to consolidate agricultural and industrial activities in targeted area.	There is already considerable industrial activity in area, with heavy congestion.
1 2 3 4 5	Relatively high security and rule-of-law	Some security concerns remain.
SME Development & BDS	Major learning institutions support business development, as well as R&D.	Large companies have access to industrial estate and therefore benefit from incentives that are unavailable to SMEs.
	Development of halal food industry is likely to open many opportunities for SMEs.	Technical and financial support would be needed from public and international development institutions.
1 2 3 4 5	Well-developed banking institutional relationships with businesses.	Banking sector might not support BDS funding and credit guarantee facility.
Linkages to Indonesia	Strong potential links to Indonesia via corridors through province.	Indonesia businesses in Sumatra would need support to link with SBEZ activities.
	Potential for training and education of Indonesian workers and businesspersons.	Financial constraints could limit access to' opportunities.
1 2 3 4 5	Opportunities for Indonesian investments in rubber, rubber wood, and palm oil.	Larger Indonesian investors are outside of subregion in Sumatra.

## C. Padang Besar Border Crossing Area

### 1. Cross-Border Trade

In 2013 the total value of cross-border trade (imports plus exports) at the Padang Besar border crossing was US\$ 5.4 billion. Of that amount, US\$ 4.4 billion were exports from Thailand to Malaysia and US\$ 1.0 billion were imports by Thailand from Malaysia (Figure 6.14). For Thailand, that volume of cross-border trade represented the second largest figure in all of Thailand's customs border checkpoint. Rubber export account for 46 percent of Thai exports to Malaysia, and computer and electronic machinery accounted for over 30 percent of Malaysian exports to Thailand.

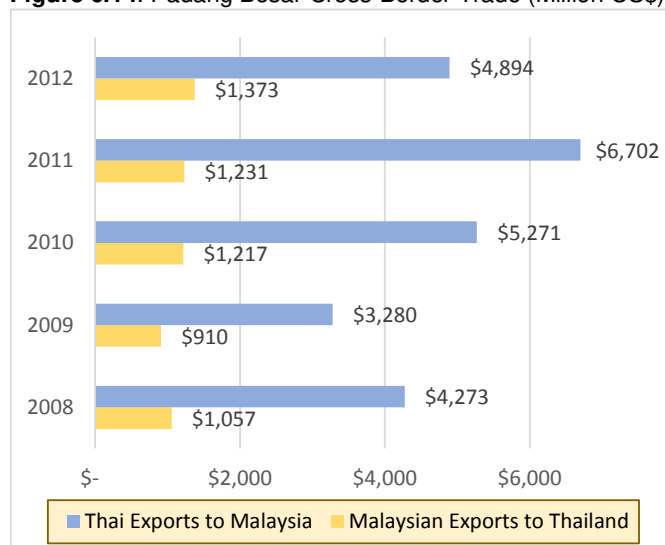
Cross-border trade in 2008-2012 has grown at an average annual rate of 8.7 percent, with exports from Thailand expanding somewhat faster than exports from Malaysia (9.4 percent annual export growth of Thailand versus 8.1 percent annual export growth of Malaysia). Those averages, however, obscure large year-to-year variations. Thailand's export growth has varied from a low of -27 percent in 2012 to a high of 61 percent 2010. Similarly, Malaysia's export growth has varied from a low of -14 percent in 2008 to a high of 34 percent in 2009.

Thai exports are 3.5 larger than Malaysia's exports, which gives rise to one of the major problem faced by trucks and railway carriers, namely, the fact that containers often return empty to Thailand after delivering their cargo in Malaysia. The lack of sufficient cargo to fill returning carriers means that the delivery cost is much higher than it would otherwise have been if the carriers returned full. As a result, the number of containers crossing the border by freight train has declined steadily in the last few years (Figure 6.15). On average, the number of full contains from Thailand has fallen by 12 percent between 2008 and 2013, while the number originating from Malaysia has declined by 33 percent during the same period.

### 2. Transport and Logistics

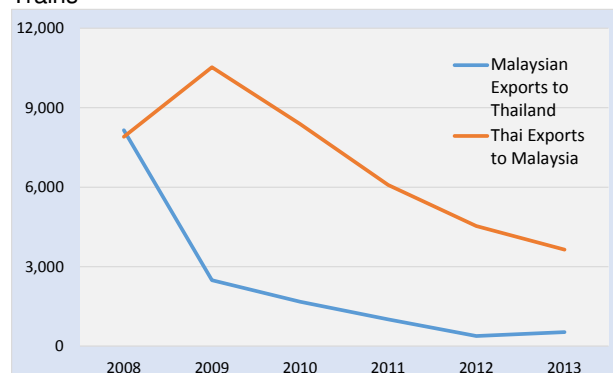
**Malaysia's Railway Station:** The railway station has a large and well-equipped inland container depot (ICD) and container freight station (CFS) that provide that offer services for containerization of break bulk cargo and off dock facilities to alleviate congestion in the customs facility (Figure 6.16). The station provides rail siding for containers to

**Figure 6.14:** Padang Besar Cross-Border Trade (Million US\$)



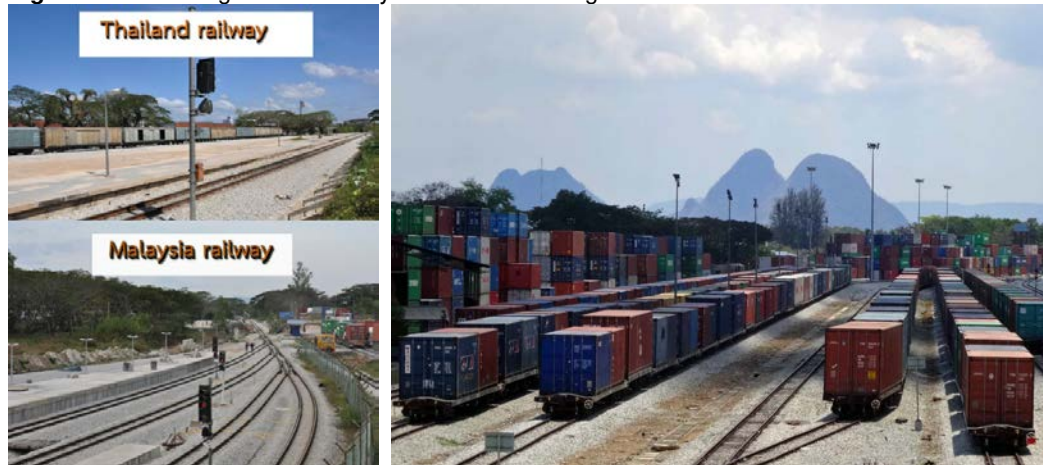
Source: Department of Foreign Trade, Ministry of Commerce and Customs office at Padang Besar, Royal Thai Government; and Royal Malaysian Customs, Padang Besar

**Figure 6.15:** Padang Besar Container Traffic by Freight Trains



Source: Thai customs office at Padang Besar and Royal Malaysian Customs, Padang Besar.

**Figure 6.16:** Padang Besar Railway at Border Crossing

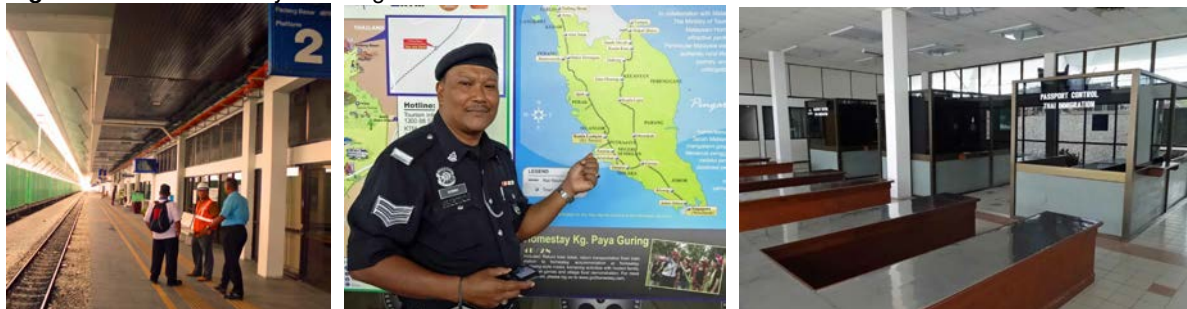


Source: Customs office at Padang Besar.

be loaded or unloaded from rail wagons with overhead cranes and other lifting equipment; a container yard for storage while waiting for customs clearance; a warehouse to store cargo; and a gate complex to regulate vehicles carrying cargo and containers through the terminal in terms of documentation, security and inspection procedures.

A new passenger station has just been completed and is starting operation (Figure 6.17). It is the only integrated customs, immigration and quarantine facility for Malaysia and Thailand where rail passengers are processed for exiting Malaysia and entering Thailand (or vice-versa if traveling the other direction) in the station. The passenger service is intended to help attract tourist to Perlis. Despite an abundance of tourism attractions like its lakes and limestone terrain and caves, Perlis has less than a million tourist a year, of which about 80 percent of them are from Thailand (NCIA, 2013).

**Figure 6.17:** New Railway Passenger Station



Source: Photos by authors.

**Thailand's CIQ:** Thailand's customs facilities were rebuilt in 1970 and upgraded in 1995. They handle road and rail traffic from two separate locations. The first is on the Padang Besar-Sadao road to handle traffic through Provincial Highway 4054 (Padang Besar-Sadao) connecting to Provincial Highway 4 at Sadao. The second is at the Padang Besar railroad station office to handle railway traffic for passenger trains between Bangkok and Butterworth, and freight trains between Kuala Lumpur and Bangkok. The major constraints are the single rail system and, for the roadway, the high degree of congestion at the border crossing (Figure 6.18).

**Figure 6.18:** Congested Road at Padang Besar border crossing.









Source: Photos by authors.

### 3. Perlis Halal Park at Padang Besar

A new Halal Park is to support the market development of halal products in the IMT-GT region. Its major focus is to support the development of SME-based halal business in such areas as frozen food and products and logistics management services, and to provide those types of enterprises with warehousing facilities. The facility is located on a 5 hectare site and there are 12 units to be leased to businesses on a 1.5 story building. The project is expected to start the operation in June 2014.



**Figure 6.19: SBEZ Assessment for Padang Besar Border-Crossing Area**

	Strengths	Drawbacks
Special Economic Zone	Close to Sadao border area, which has been nominated for possible Rubber City.	Southern Industrial Estate has established industrial park ready for Rubber City.
	Malaysian free zone is near border.	Congestion of area around border will limit opportunities for support industries to SEZ.
1 2 3 4 5	Relatively high levels of skilled workers in area.	Possible sensitivity from inhabitants to development of SEZ in area.
Value Chains	Rubber industry cooperation through Rubber City is well advanced.	Better opportunities for cooperation could be developed in neighboring provinces.
	Rubber wood industry could expand to downstream industries.	Downstream industries such as furniture are highly competitive in international market.
1 2 3 4 5	Cooperation in palm oil industry with Malaysia could improve integrated production system.	Considerable work needs to be done to improve oil extraction rates and improve the industry's competitiveness.
Transport & Logistics	Railroad line connects to Malaysia's West Coast trunk line and is part of Thailand's main southern line to Bangkok via Hat Yai.	Lack of railway station on Thai side. Land constraint prevents major expansion in railway facilities.
	Well-established route servicing second largest cross-border trade in Thailand.	Containers return empty from Malaysia, increasing cost of rail transport; trucking routes are much faster than rail transport.
1 2 3 4 5	Construction of double-track railway system is planned.	Budget constraints may prevent implementation of double track railway for a considerable amount of time.
Socio-Econ Development	Government has wide-ranging development plans.	Population of province has the highest per capita GPP in the Southern Region.
	SBEZ could help to consolidate agricultural and industrial activities in targeted area.	There is already considerable industrial activity in area, with heavy congestion.
1 2 3 4 5	Relatively high security and rule-of-law	Some security concerns remain.
SME Development & BDS	Major learning institutions support business development, as well as R&D.	Large companies have access to industrial estate and therefore benefit from incentives that are unavailable to SMEs.
	Development of halal food industry is likely to open many opportunities for SMEs.	Technical and financial support would be needed.
1 2 3 4 5	Well-developed banking institutional relationships with businesses.	Banking sector might not support BDS funding and credit guarantee facility.
Linkages to Indonesia	Strong potential links to Indonesia via transport corridors that run through province.	Indonesia businesses in Sumatra would need support to guide and assist them to link with proposed SBEZ activities.
	Large potential for training and education of Indonesians.	Financial constraints could limit accessing training and educational facilities.
1 2 3 4 5	Opportunities for investments in rubber, rubber wood, and palm oil industries.	Larger Indonesian investors are outside of subregion in Sumatra.

## D. Ban Prakob – Durian Burung Border Crossing Area

### 1. Cross-Border Trade

Cross-border trade statistics are limited because of the recent opening of the facilities. Thailand's exports to Malaysia were US\$ 6.8 million between June and December 2013. They were mainly in the form of consumer goods (clothing and kitchenware) and motorcycle parts. Arrival and departure of passenger vehicles have been on the rise since the opening of the border, growing from 4,000 in 2011 to nearly 5,900 in 2012 and nearly 7,000 in 2013. Pedestrian traffic has also risen, beginning with 165,000 in 2011 and expanding to 196,000 in 2012 and 231,000 in 2013.

### 2. Transport and Logistics

**Thailand's CIQ:** Thailand's border crossing facilities began construction in January 2010 and they were completed in April 2013. Operations began in June 2013 (Figure 6.20). The facilities cover nearly 13 hectares and are located about 90 kilometers from Hat Yai, 84 kilometers from Songkhla, 106 kilometers from Pattani, and 130 kilometers from Yala. The buildings house (a) the CIQ and vehicle inspection area; (b) administrative building; (c) inspection building; (d) warehouse, as well as the living area and canteen building. The ICQ and passenger inspection building contain four departments, namely, customs, immigration, communicable diseases, and labor. The cargo inspection building contains departments related to customs, agriculture, food and drugs, livestock, fisheries, and wildlife. A second phase covering an additional 27 hectares is planned for 2014-2016. The Ban Prakob customs office includes a one-stop service management system for integrated services.

**Figure 6.20:** Ban Prakob Border Crossing



Source: Customs office at Ban Prakob.

**Malaysia's ICQS:** The immigration, customs, quarantine and security (ICQS) also began construction in January 2010 and was completed in early 2013 (Figure 6.21).

**Figure 6.21:** Durian Burung Immigration, Customs, Quarantine and Security (ICQS) Facilities

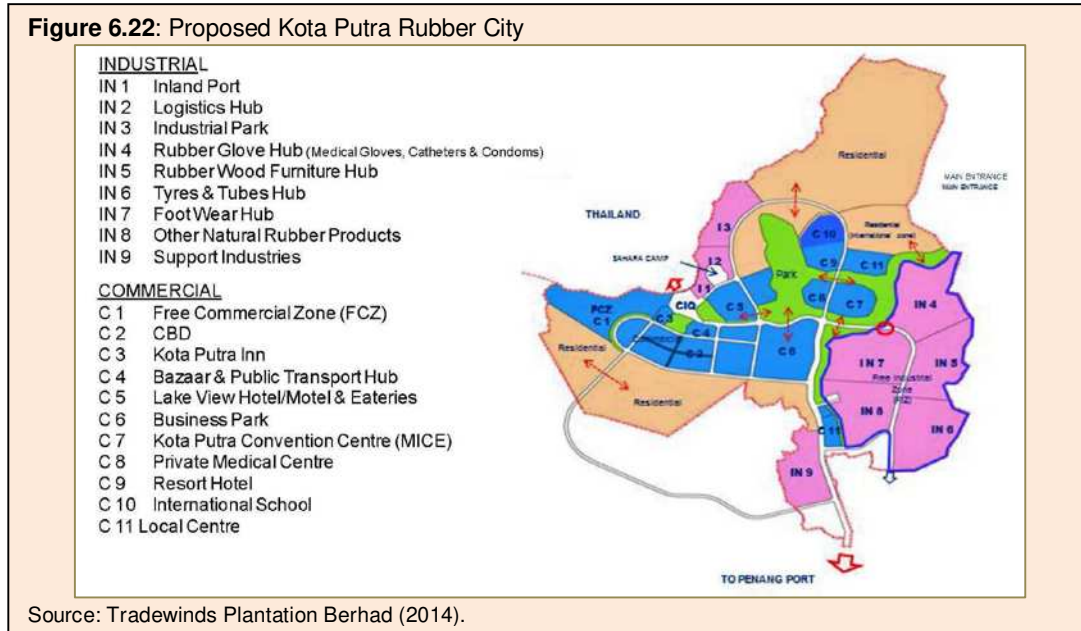


Source: Photo by authors.



### 3. Rubber City

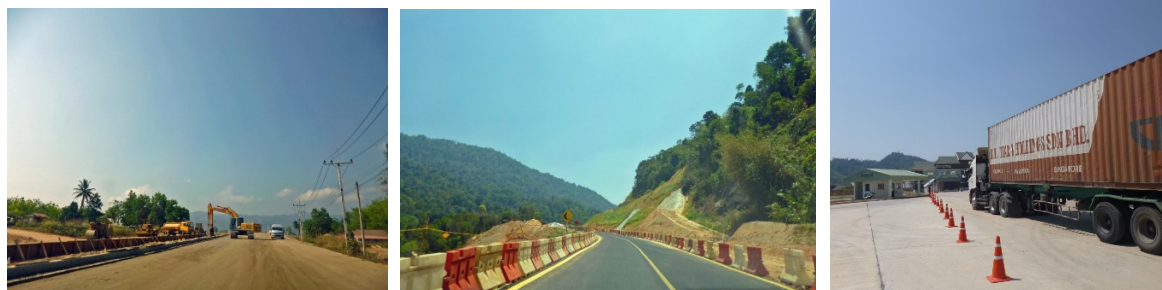
**Kota Putra Rubber City:** The proposed Rubber City is project is a private sector initiative by Tradewinds Plantation Berhad and is facilitated by both the Kedah State Government and the Federal Government of Malaysia. The site will cover 913 hectares bordering Thailand and will include an inland port, logistics park, industrial hub for production of rubber products and rubber wood furniture, along with support industries (Figure 6.22). It will also include a free commercial



zone (FCZ) next to the ICQS and a border town with facilities for schools, hotels and restaurants, convention center, medical center, and public transportation. The aim of the project is to help establish Malaysia as the global leader for rubber-based products through the collaboration with Tun Abdul Razak Research Centre (TARRC), Malaysian Rubber Board (MRB) and institutes of higher learning. It will encompass three industrial sectors: tires, industrial rubber goods, and polymer and rubber for defense industry products.







**Thai Side of Border:** The ongoing construction of a four lane highway on the Thai side of the border could greatly facilitated and promote investment in an SBEZ in the area (Figure 6.23). However, the land near the border has been designated for agriculture and natural parks. There could be a negative reaction by the local population to any reversal in that decision. There are, nevertheless, other possible sites further north of the border that would be acceptable and generate employment and income for the local population.

**Figure 6.23: Construction of Four-Lane Highway to Ban Prakob Border and Operations at Ban Prakob CIQ**



Source: Photos by authors.

**Figure 6.24: SBEZ Assessment for Ban Prakob – Durian Burung Border-Crossing Area**

Ratings	Strengths	Drawbacks
Special Economic Zone	Proposed Kota Putra Rubber City is fully integrated industrial park with integrated border town development.	On Thai side of border, area has already been designated for agricultural production and natural parks.
	Kota Putra Rubber City is aligned with Kedah State's Development Strategy	Southern Regional Industrial Estate near Hat Yai has established industrial park ready for Rubber City.
1 2 3 4 5	Kota Putra Rubber City would benefit from new ICQS facilities and good roads.	On Thai side of border, possible sensitivity from farmers to development of SEZ.
Value Chains	Thai-Malaysian rubber industry cooperation is well advanced.	Better opportunities for cooperation could be developed in neighboring provinces.
	Rubber wood industry could expand to downstream industries.	Downstream industries such as furniture are highly competitive.
1 2 3 4 5	Cooperation in palm oil industry with Malaysia could improve integrated production system management.	Considerable work needs to be done to improve oil extraction rates and improve the industry's competitiveness.
Transport & Logistics	New customs facilities with similarly modern facilities on both side of border	All ICQ facilities at Thai-Malaysian border could benefit from common control area.
	Four-lane highway being constructed on Thai side of border.	Limited land area for commercial activities near border.
1 2 3 4 5	Well maintained highway on system on Malaysian side of border.	Lack of existing commercial facilities on Malaysian side of border.
Socio-Econ Development	Malaysian government has wide-ranging development plans.	Population of Songkhla province has the highest per capita GPP in Southern Region.
	SBEZ could help to consolidate agricultural and industrial activities in targeted area.	In Songkhla, considerable industrial activity already exists.
1 2 3 4 5	Relatively high security and rule-of-law in Kedah State.	Some security concerns remain in Songkhla Province.
SME Development & BDS	Major learning institutions support business development, as well as R&D.	Large companies have access to industrial estate and therefore benefit from incentives that are unavailable to SMEs.
	Development of support industries for Rubber City would open opportunities for	Technical and financial support would be needed.
1 2 3 4 5	Well-developed banking institutional relationships with businesses.	Banking sector might not support BDS funding and credit guarantee facility.
Linkages to Indonesia	Strong potential links to Indonesia via modern transport network.	Indonesia businesses in Sumatra would need support.
	Large potential for training and education of Indonesians.	Financial constraints could limit access to training and educational facilities.
1 2 3 4 5	Opportunities for Indonesian investments in rubber, wood, and palm oil industries.	Larger Indonesian investors are outside of subregion in Sumatra.

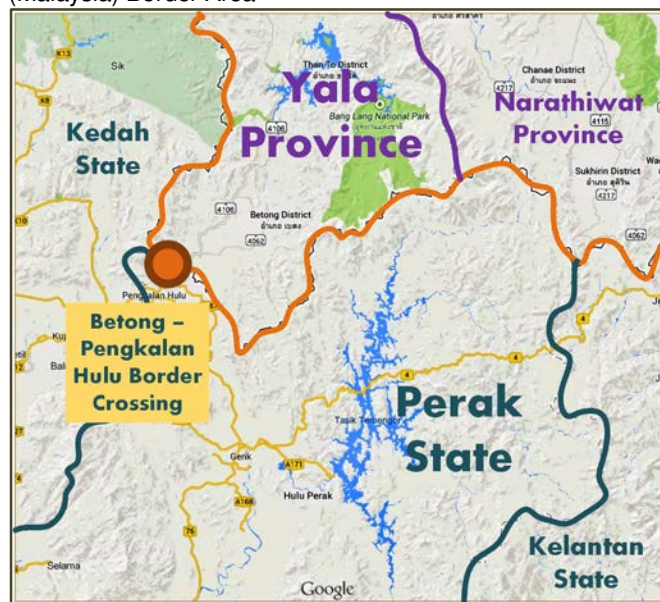
## VII. YALA – PERAK BORDER CROSSING

### A. Profiles and Development Strategies

#### 1. Geographic and Demographic Profile

**Yala Province:** The province of Yala is bordered by Perak State of Malaysia to the south, Songkhla province to the west, Pattani province to the north, and Narathiwat province to the east. The district of Betong, where the border crossing to Malaysia is located, is the southernmost district of the Thailand (Figure 7.1). It borders the Malaysian state of Perak to the south and Kedah to the east. The distance from Betong to the city of Penang is 410 kilometers through a good roadway system, while the distance to Yala, the capital of the province, is 140 kilometers through windy mountainous roads. Other notable distances are (a) from Betong to Hat Yai: 261 kilometers; and (b) from Betong to Sadao border in Songkhla province: 120 kilometers. Yala is one of the four provinces of Thailand with a Muslim majority. About 72 percent of

**Figure 7.1:** Yala Province (Thailand) and Perak States (Malaysia) Border Area



Source: Map by Google, modified by authors.

the people are Malay speaking Muslims, and the remainder are Thai and Thai Chinese Buddhists. Security issues remain in the province because of the ethnic separatist insurgency, which has reduced tourism and foreign investment in the area (Figure 7.2).

**Perak State:** Perak State is the second largest state in Peninsular Malaysia. It borders Kedah and the Thai Yala Province to the north; Penang to the northwest; Kelantan and Pahang to the east; Selangor to the south, and the Straits of Malacca to the west. Perak also is the second most developed state in Malaysia, behind Selangor, and it has the highest per capita income of any of the bordering states with Malaysia. Once Malaysia's most populous state, Perak has yet to recover from an economic slowdown caused by the decline in the tin mining industry and a massive drain in manpower to higher-growth states such as Penang, Selangor and the federal territory of Kuala Lumpur. Perak's population of 2.3 million has an annual rate of 0.4 percent growth. Its ethnic composition is 54 percent Malay, 31 percent Chinese, 13 percent Indian, and 2 percent other. Of the total population, 55 percent are Muslims, 25 percent Buddhists, 11 percent Hindi, 4 percent Christians, and 5 percent other. Agriculture is one of Perak's main economic activities, especially in the areas of rubber, coconut and palm oil, and tourism is a growing sector because of the state's abundance of natural attractions.

#### 2. Development Strategy

**Yala Province:** The province of Yala has over 200,000 hectares rubber plantations that include rubberwood used in the local furniture companies. Tourism is important to Betong because of the large number of Malaysians that visit the area. There are numerous Thai-Chinese shrines that are visited by Thai and Malaysian Chinese for the yearly celebrations. Most of the population in



**Figure 7.2:** Security Remains a Concern in Yala, Narathiwat and some parts of Songkhla



Source: Photo by authors.

Betong, however, is involved in the rubber production and the growing of rubber trees. Exports to Malaysia are mainly in the form of rubber latex, compound rubber, rubber sheet and rubber scrap.

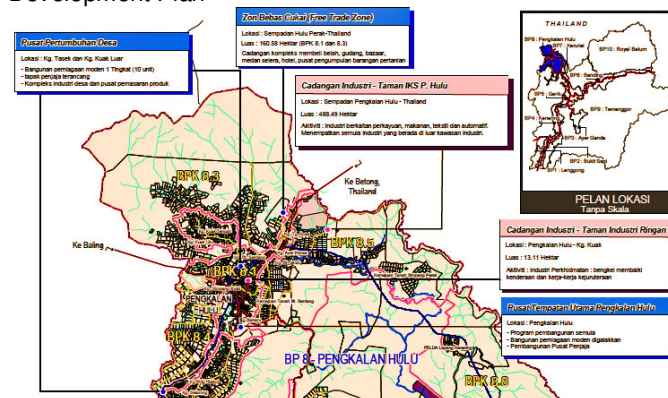
According to the Development Plan of the Five Southern Border Provinces Special Zone, Yala is set to become an agricultural and processed agricultural production center and an agricultural commodity market (Office of the Prime Minister of Thailand, 2013). The province has a policy to arrange a market for various groups of farmers who have been urged to produce quality products and create brands for Yala. All agricultural goods and processed products will have to be up to the

Good Agricultural Practice (GAP) standards certified by the Yala Office of Agriculture and Cooperatives and to pass chemical residue checks by the Yala Provincial Public Health Office. Major cash crops in this province include rubber, oil palm, and fruit, particular longkong and durian.

**Perak State:** Development plans associated with the border crossing focus on Hulu Perak district, one of Perak's nine administrative districts, and its transformation into a green district and center for productive natural resources. The development strategy envisions the transformation of the border town of Pengkalan Hulu, 7 kilometers from the border, into a border tourism town. Apart from upgrading transportation and public utilities, the plan involves proposals for substantially upgrading the recreational sector through improved landscapes and gardens that will

attract tourists to the area, along with the general beautification of the town center and efforts to attract medium to high-end hotels and restaurants (NCIA, 2014c). Commercial activities are also to be strengthened through business development of SMEs in support centers for the two growth centers planned in the area. New housing is to be built in a 330 hectare village within the town, and other area covering 60 hectares will be developed for new housing to meet the expected population growth associated with the development of the border region. Near the border the 448 hectare Taman IKS industrial area will concentrate on activities related to textiles, timber and food processing (Figure 7.3). A separate Pengkalan Hulu Light Industrial Park is to be constructed in an area covering 13 hectares to relocated existing vehicle workshops and other businesses that are scattered along the road into a central location. The industrial park will also attract and promote new light industry and support businesses, and include utilities and support facilities like food courts.

**Figure 7.3:** Pengkalan Hulu Commercial and Industrial Development Plan



Source: NCIA, 2014a.

## B. Betong - Pengkalan Hulu Border Crossing Area

### 1. Cross-Border Trade

Thai export in fiscal year 2013 (October 2012 to September 2013) were US\$ 139 million, which represented a 23.5 percent decline from the previous year. Malaysian exports during that period were much lower at US\$ 5.7 million, down by nearly 5 percent from the previous year. The average level of Malaysian exports in 2008-2013 was only 3.6 percent of that of exports, and the type of products imported were mainly industrial inputs (liquid ammonia and its containers, wood processing machinery and wood ovens). In contrast, the large volume of Thai exports across the border were mainly in the form of rubber products and rubberwood.

**Figure 7.5:** CIQ Facilities in Betong (Yala Province of Thailand) and Pengkalan Hulu (Perak State of Malaysia)

CIQ Facilities in Betong:



CIQ Facilities in Pengkalan Hulu:



Source: Photos by authors.

The Betong district government has identified an area to be designated as an industrial estate for processing rubber into such products as motorcycle tires, rubber glove and paint factories. There are also proposals to provide special incentives for domestic and foreign investors to attract business into the zone.

### 2. Transport and Logistics

On the Malaysian side of the border, there is a well maintained road has been built to link Betong to various destinations, whereas the road from Betong to Yala capital is winding and narrow (Figure 7.4). There are plans to upgrade the road from Betong to the capital city of Yala in 2015-2018 in order to reduce travel time and to build an airport in Betong to promote tourism. There are also plans to upgrade the Thai customs facility with a new customs building and a container yard to accommodate cargo transit to Butterworth port in Penang.

**Figure 7.4:** Highway System around Betong – Pengkalan Hulu Border Crossing Area

Highway on Malaysian Side of Border:



Road from Betong to Yala Capital:



Source: Photos by authors.

### 3. Customs Immigration and Quarantine Facilities

The Betong CIQ is currently being upgraded to add administrative buildings and residences for officials. It is expected to be completed in January 2015. The recently completed Malaysian ICQS complex offer modern facilities (Figure 7.5).

### 4. Malaysian Free Trade Zone and CIQ Complex

On the Malaysian side of the border, a planned free trade zone (FTZ) will include the CIQ complex, a shopping mall complex, a food and bazaar center, support services such as parking areas and public services, and a collection and distribution center for agricultural products (NCIA, 2014c). The FTZ components are expected to be completed by 2020, with the initial phase concentrating on the Carnival mall shopping complex and wholesale fresh market site, followed by a wellness village, hotel and services apartment, commercial park, and SME park. Efforts are currently being made to attract foreign investment from Thailand. The expectation was that the duty free and commercial mall would be completed at the end of 2014, but construction has been delayed by the absence of interested investors to date (Figure 7.6). According to the Joint Public Private Committee (2014), the lack of investor interest has been caused by inadequate coordination and information sharing between the Perak and Yala authorities in promoting development potential of border area.

**Figure 7.6:** Betong Customs Checkpoint and Highway on Malaysian Side of Border

Existing Site for FTZ Complex, including Carnival Mall:









Planned Design of Carnival Mall:



Source: Photos by authors and NCIA (2014c).



**Figure 40: SBEZ Assessment for Betong – Pengkalan Hulu Border-Crossing Area**

Ratings	Strengths	Drawbacks
<p>Special Economic Zone</p>  <p>1 2 3 4 5</p>	<p>Development of Malaysian FTZ and Pengkalan Hulu Commercial &amp; Industrial Development could greatly improve commerce and industry.</p>	<p>Lack of investor interest in the FTZ has delayed development of the area.</p>
	<p>Commercial zone could support expansion of tourism industry.</p>	<p>Security issues could limit expansion of tourism sector on Thai side of border.</p>
	<p>Zone in Betong designated for industrial estate to process rubber.</p>	<p>Budgetary constraints could delay establishment of industrial estate.</p>
<p>Value Chains</p>  <p>1 2 3 4 5</p>	<p>Potential expansion of downstream production of rubber products.</p>	<p>Lack of skilled manpower, though foreign investment could provide skills transfer.</p>
	<p>Potential expansion of furniture industry based on rubberwood production.</p>	<p>Market for furniture is highly competitive and fast changing.</p>
	<p>Large tourism activity in Betong, with potential of spinoffs in various industries.</p>	<p>Security issues a important constraint to growth of tourism industry.</p>
<p>Transport &amp; Logistics</p>  <p>1 2 3 4 5</p>	<p>Excellent roads to Butterworth port in Penang.</p>	<p>Lack of commercial activity along new highway to provide support services.</p>
	<p>Planned upgrading of customs faculties on Thai side.</p>	<p>Budgetary constraints could delay upgrading.</p>
	<p>Planned upgrading of road to Yala.</p>	<p>Budgetary constraints could delay upgrading.</p>
<p>Socio-Econ Development</p>  <p>1 2 3 4 5</p>	<p>SBEZ could improve income and welfare of local population.</p>	<p>Expansion of industrial activities could undermine tourism activities.</p>
	<p>Strong networking between public and private sector entities in Betong area.</p>	<p>Lack of existing knowledge centers in province to support SBEZ activities.</p>
	<p>SBEZ could provide large downstream opportunities for rubber-based livelihoods.</p>	<p>Limited financial capital of local businesses.</p>
<p>SME Development &amp; BDS</p>  <p>1 2 3 4 5</p>	<p>Both Betong and Pengkalan Hulu SMEs have strong networking system.</p>	<p>Coordination of public-private sector activities would need technical assistance.</p>
	<p>Joint BDS center could enhance skills and knowledge for SME activities.</p>	<p>Establishment of joint BDS center would require considerable technical assistance.</p>
	<p>Opportunities to integrated SMEs into rubber-based SBEZ activities.</p>	<p>BDS centers would require sustainable financing mechanism in the long run.</p>
<p>Linkages to Indonesia</p>  <p>1 2 3 4 5</p>	<p>Opportunities for Indonesian investors in rubber industry.</p>	<p>Large Indonesian investors are outside Sumatra Subregion of IMT-GT.</p>
	<p>Opportunities for Indonesian investors in rubberwood industry.</p>	<p>Businesses in Sumatra Subregion would require help in identifying potential opportunities in rubberwood industry.</p>
	<p>Opportunities for Indonesian investors in furniture industry.</p>	<p>Indonesian furniture industry in Sumatra also lacks production knowledge needed to compete in global furniture market.</p>

## VIII. NARATHIWAT – KELANTAN BORDER CROSSINGS

### A. Profiles and Development Strategies

#### 1. Geographic and Demographic Profiles

**Narathiwat Province:** The province of Narathiwat, with an area of 4,475 square kilometers, is located in the eastern end of the southern border provinces of Thailand. The bordering Thai provinces are Yala to the west and Pattani to the north. To the east is the Gulf of Thailand and to the south is the Malaysian state of Kelantan, which is part of the economic development area of the East Coast Economic Region (ECER) of Malaysia. In the south of the province, there are four districts: Amphor Takbai, Amphor Su-Ngai Golok, Amphor Waeng, and Amphor Sukirin. The Bang Nara is the main river and it enters the Gulf of Thailand at the town of Narathiwat. Narathiwat is one of four Thai provinces that have a Muslim majority. Out of the total provincial population of around 800,600, there are 82 percent who are Muslim and 18 percent that are Buddhist. Also, 80 percent speak Pattani Malay as their first language. The Narathiwat Malays are very similar in ethnicity and culture to the Malays of Kelantan, Malaysia.

**Figure 8.1:** Narathiwat Province (Thailand) and Kelantan States (Malaysia) Border Area



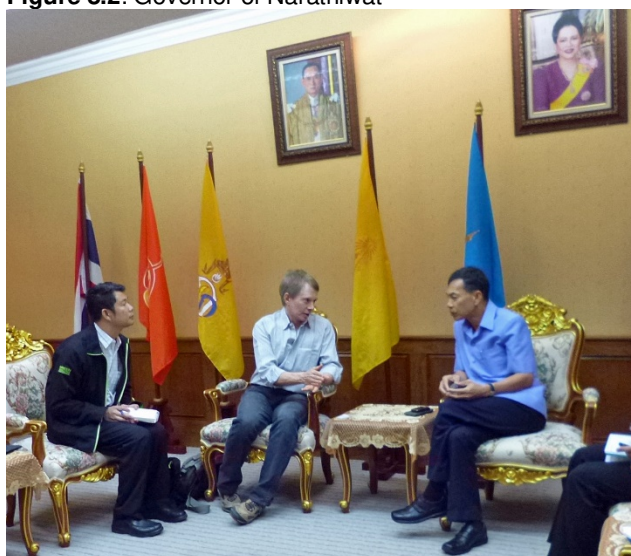
Source: Map by Google, modified by authors.

**Kelantan State:** The state of Kelantan is in the north-eastern corner of Peninsular Malaysia and has 10 districts that together have a land area of nearly 15,000 square kilometers. It shares three border crossings with the Thai province of Narathiwat: Su-ngai Kolok, Takbai, and Buketa (Figure 8.1). The mainly agrarian economy is dominated by rice, rubber, tobacco, and fishing. Logging activities are also important given the vast remaining area of forest and, in recent years, tourism has grown in importance. Kelantan has a state GDP per capita that is almost half of that of neighboring Perak and it is one of four states not currently ruled by the Barisan Nasional coalition, with the conservative political party of the Islamic Party of Malaysia (PAS) ruling the state since 1990. The population of 1.5 million is 97 percent Islamic, 2.5 percent Buddhist, and 0.5 percent other.

#### 2. Development Strategy

**Narathiwat Province:** The province is a major center for agricultural production as well as manufacturing. The province is being developed as a center for halal food production. The Royal Government of Thailand is encouraging production and export of halal products and foods to Muslim consumers around the world, and there is a large potential for Thailand to expand this industry through collaboration projects with Malaysia and Indonesia, as well as Brunei Darussalam. The Islamic Bank of Thailand has branches in Narathiwat province for funding these and other types of projects, and there are a number of country-wide organizations that can provide support in terms of knowledge and technology, such as the Halal Science Center at Chulalongkorn University.

**Figure 8.2:** Governor of Narathiwat



Source: Photo by authors.

Historically, there has been informal trade along the provincial border with Malaysians in rice. The network flourished until stricter border controls were put into place in 2004, following political unrest. Unofficial markets for the distribution of cross-border rice trade continue to exist and expand based on formalized networks of traders (Khemakunasai, 2014).

The Government's strategic goals for 2015-2018 are (a) to develop production, border trade, local products, tourism and sports linked to the ASEAN Economic Community (AEC); (b) to develop quality of life base on its "sufficiency economy" approach; and (c) to promote peace in the area. Specific projects planned for 2015-2018 include: (i) a railway project linking Su-ngai Kolok to the Malaysian district of

Pasir Mas in order to promote Thai-Malaysian tourism; (ii) construction of a highway, bridge and customs facility linking Takbai and Pengkalan Kubor to replace the car ferry crossing; (iii) Narathiwat airport terminal and runway expansion project to accommodate more traffic; (iv) construction of the Bukit Tal customs office and logistics center; (v) construction of a Kolok River crossing bridge between Su-ngai Kolok and Rantau Pnajang; (vi) construction of an industrial estate and logistics center in Khok Krako, Takbai; and (v) construction and operation of an agricultural market. Development of the Narathiwat Agricultural Market is expected to facilitate trade in agricultural goods and services between Thailand and Malaysia. The total project area is over 50 hectares in Yi-ngo district. There are also a number of projects under the strategies plan to promote agricultural production, non-agricultural industries and international trade.

There are important learning centers in the province, one of which is the Princess of Naradhiwas University in the Narathiwat capital city (Figure 8.3). Founded in 2005, it consolidated Narathiwat Technical College, Narathiwat Agricultural and Technology College, Takbai vocational college and Boromarjonani College of Nursing, and therefore offers learning opportunities in a wide range of areas.

The Government's Emergency Decree is in force in Narathiwat, as well as the neighboring provinces of Yala and Pattani, with the Internal Security Act also applicable in parts of Songkhla province.

**Kelantan State:** The state's development strategy is embodied in the East Corridor Economic Region (ECER) master plan for 2020. As mentioned in Section IV.D above, there are five clusters in the master plan: tourism, oil and gas, manufacturing, agriculture and education. The key drivers

**Figure 8.3:** Princess of Naradhiwas University is a Major Learning Center in the region.



Source: Photo by authors.

are the development of adequate hard and soft infrastructure, a strong basic training and educational system, a conducive working and living environment, and a stable political and social environment. In manufacturing, Kelantan is focusing on the development of halal food and manufacturing of their products in Pasir Mas. Border town developments in Pengkalan Kubur, Rantau Panjang and Bukit Bunga will help to promote tourism and cross-border trade with Thailand. Primary roadwork include projects to widen existing federal roads from Kuala Krai to Gua Musang and Kuala Lipis. Phase III of the East Coast Expressway will be built to link Kota Bharu and Kuala Terengganu, plus upgrade the Pengkalan Kubor Integrated Border Gateway to Thailand. In addition, a plan to improve facilities at the Kota Bharu Airport aims to improve connectivity to Thailand, Indonesia and other destinations. Finally, a major education hub is being created in Kota Bharu-Bachok through the establishment of Universiti Malaysia Kelantan (UMK).

### 3. Narathiwat Special Economic Zone

As part of Economic Corridor 1's development, the IMT-GT roadmap for 2012-2016 puts forward as one of its major strategic objectives the large-scale development of an SBEZ that consolidate the Narathiwat SBEZ in Thailand and the industrial and urban development sites in Kelantan and Kedah States in the East Coast Economic Region (ECER) of Malaysia (IMT-GT, 2012). The implementation roadmap states the following (IMT-GT, 2012, p.12):

*Large scale development of special border economic zones (SBEZs) will involve the preparation of master plans and implementation plans in strategically located provinces in the border of Thailand and Malaysia. A master plan for the development of Narathiwat SBEZ (Thailand) is part of the long-term strategy to develop Sadao–Bukit Kayu Hitam, Narathiwat–Kelantan and the joint township at Betong–Pengkalan under the JDS—a bilateral cooperation framework involving Thailand and Malaysia. A master plan for Kota Bharu City will also be conducted by Malaysia to rationalize spatial planning and investments for the future development of Kota Bharu City, focusing on the required infrastructure and utilities, and the potential for developing new retail and leisure areas. Kota Bharu in Kelantan State has always been a center for crossborder trading and tourism due to its proximity to Thailand. Malaysia will also undertake a strategic implementation plan for the development of Bukit Bunga–Jeli, a new strategic entry point resulting from the opening of the Bukit Bunga–Ban Buketa Bridge (the “Friendship Bridge”) in Kelantan State in December 2007 and the establishment of the Bukit Bunga CIQ Complex in January 2011.*

According to the IMT-GT roadmap, a cluster of value-added chains is to be developed in Narathiwat, Pattani and Yala provinces with the status of SEZ, taking advantage of their proximity linkage with the ECER of Malaysia (Figure 8.4). The SEZ is to link the main gateways of Thailand with Malaysia through Narathiwat Province at Sungai Golok–Rantau Panjang, Takbai–Pengkalan Kubur, and Buketa–Bukit Bunga. Narathiwat will be promoted as the hub and main gateway connecting with ECER and other planned developments at Kelantan State on the Malaysian side. The project is to develop an integrated plan for establishment of SBEZ at Narathiwat–Pattani–Yala connecting with ECER. The priority will be the construction of a new bridge link at Sungai Golok–Rantau Panjang and Takbai–Pengkalan Kubur to link with Kelantan State at the ECER. A new industrial estate will be established at Takbai to induce more investments in Narathiwat. The value chain will extend to Pattani's Halal Industrial Estate (IEAT). Other developments in the area include the new CIQ facilities, the Narathiwat agricultural market, Takbai CIQ green area for tourists, Sungai Golok tourist service center, Sungai Golok recreation area, and the Sungai Golok municipality flood protection system. Border townships are also planned for Takbai, Sungai–Kolok, Buketa, Yingo, and Ruesa (IMT-GT, 2012).



**Figure 8.4:** Designated SEZ Site in Narathiwat near Thai-Malaysian border



Source: Map by Thinknet, modified by authors.

In an effort to establish joint partnership activities between Malaysia and Thailand for the development of cross-border activities between Narathiwat and Kelantan, the two governments signed a partnership agreement in 2012 outlining areas of collaboration (Government of Malaysia and Government of Kingdom of Thailand, 2012). Those areas include strengthening consultation mechanisms, promoting cross-border trade and investment in economic sectors that are of common interest to both countries, energy collaboration, promote joint ventures in the halal industry, enhance peace and security at the border and eliminate human trafficking, promote business and economic cooperation between the private sectors of both countries at the border areas in such industries as oil and gas, power, automotive, commodities (rubber, rice, sugar), and tourism for the socio-economic development of the border populations; collaborate in the development of SEZs; and construct bridges crossing the Golok River at Rantau Panjang – Sungai Golok towns, and Pengkalan Kubor – Takbai.

At present, NESDB is conducting a broad-based study to identify different types of SEZs that could be implemented, along with common incentives for each type that would be suitable for areas in Thailand. The study is to be completed in July 2014. Once the study is completed, the Narathiwat SEZ will be able to proceed, with special focus on halal foods and agroprocessing. The SEZ concept that has been put forward for Narathiwat encompasses four areas (Provincial Government of Narathiwat, 2013): (a) border city development of Takbai, Sungaikolok and Buketa; (b) development project support from Yenior city based on agricultural and livestock production as well as border trade area and logistics center; (c) industrial activity in Ruesae district associated with garment factory; and (d) industrial development zone in Nanak city in Takbai districts.

## **B. Su Ngai Kolok - Rantau Panjang Border Crossing Area**

### **1. Cross-Border Trade**

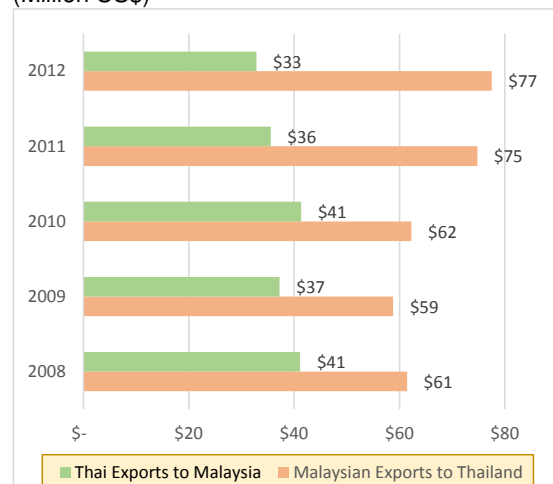


Malaysian exports to Thailand through the Su Ngai Kolok border checkpoint are about twice as large as Thai exports to Malaysia (Figure 8.5). In 2012 the Malaysian value of exports was US\$ 77 million, and the value of Thai exports was US\$33 million. The resulting Thai trade deficit is

likely to widen under current trading conditions since their imports in 2008-2012 grew at an average annual rate of 6 percent, whereas their exports decline by an average of 5 percent a year.

Information on the composition of trade is based on consolidated data for both the Su-ngai Kolok and Takbai border crossings (Figure 8.6). Most of the Malaysian exported products are in the form of logs (86 percent of all their exports), followed by raw hides and leather. Other Malaysian product exports, such as flour and scrap paper, represent 1 percent or less of the total. However, Malaysian raw hides and leather exports are becoming increasingly important, with an average growth of over 20 percent a year since 2008 compared with an average annual growth of 5 percent in log exports.

**Figure 8.5:** Su-ngai Kolok Cross-Border Trade, 2012 (Million US\$)



Source: Department of Foreign Trade, Ministry of Commerce, Royal Thai Government; and Royal Malaysian Customs.

Exports from Thailand are more diversified and consist of livestock products (32 percent), fresh, chilled, frozen or dried fruit (13 percent), fish (10 percent), fabric and yarn (6 percent), and leather and other leather products (4 percent). There are a variety of other types of exports of smaller importance, but together those other products account for 36 percent of total exports.

## 2. Transport and Logistics

The Sungai Golok–Rantau Panjang Bridge will link Rantau Panjang in Kelantan state of Malaysia with Su-ngai Kolok town in Narathiwat. The project is expected to increase the capacity of the existing bridge-crossing at this location. The current bridge was built in 1977 as a single carriage-way (2-lane) concrete bridge (Figure 8.7). However, it is now unable to accommodate the rapid growth and planned developments in the border areas.

Sungai Kolok is the railhead on the east coast branch of the State Railways of Thailand's southern line. On the Malaysian side, the rail crossing is on a branch line that is connected to Malaysia's East Coast line. In Narathiwat, the

**Figure 8.6:** Major Traded Products at Su-ngai Kolok – Rantau Panjang and Takbai – Pengkalan Kubur, 2012 (%)

Exports of Thailand to Malaysia		
1.	Livestock products	32%
2.	Fresh, chilled, frozen or dried fruit	13%
3.	Fish	10%
4.	Fabric and yarn	6%
5.	Leather and other leather products	4%
6.	Other	36%
Total		100%
Exports of Malaysia to Thailand		
1.	Logs	86%
2.	Raw hide, leather	5%
3.	Flour products	1%
4.	Scrap paper	1%
5.	Flour	1%
6.	Other	5%
Total		100%

Source: Based on data from Department of Foreign Trade, Ministry of Commerce, Royal Thai Government

**Figure 8.7:** Road and Rail Crossings at Rantau Panjang – Bu-ngai Kolok Border Crossing



Source: Photos by the authors.

crossing is connected to the Sungai Golok branch line, which links up with the main southern line at Hat Yai.

**Thailand ICQ:** The facility is being upgraded and the new complex is scheduled for completion in 2012–2016 (Figure 8.8). The executing agencies are the Department of Public Works and Town and Country Planning, Customs Department, and other relevant agencies. The expanded facility will accommodate the anticipated increase in traffic through resulting from the new SEZ and the associated cross-border trade with Malaysia.

**Malaysia ICQS:** The first facility was opened in 1949 and the latest complex was constructed in 1999. In 2013 it processed 1.9 million arrivals and departures of persons, 84 percent of which were Thais, 14 percent Malaysians, and 2 percent others (Royal Malaysian Immigrations, 2014a). The major goods arriving from Thailand are fresh fruits and vegetables, small-scale machinery, and cup lump rubber (Royal Malaysian Customs, 2014).

**Figure 8.8:** Su-ngai Border Crossing



Source: Photos by authors.

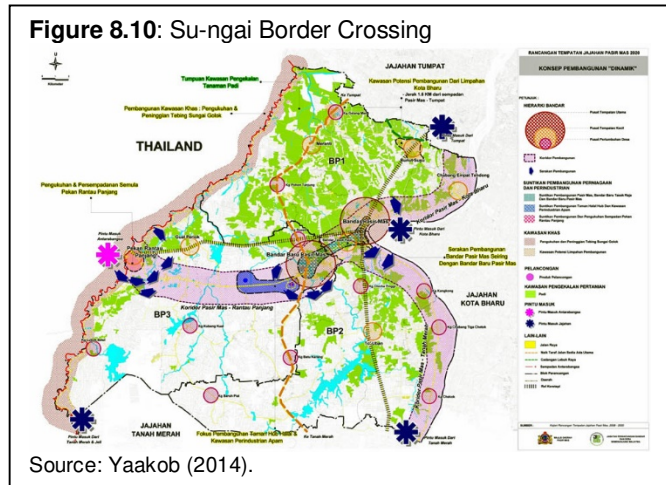
**Figure 8.9:** Rantau Panjang Border Crossing



Source: Photos by authors.

### 3. Border Town Development

The border town of Rantau Panjang is Free Trade Zone (FTZ) and is an important commercial center for Malaysian from east coast states who come to purchase Thai goods. The Kelantan Structural Plan for 2020 identifies the town as the state's principal gateway to Thailand and a key growth center (Figure 8.10). A 'ring road network' is also planned to facilitate and improve road management in the area, along with pedestrian walkways in the town area. The entire development would cover 263 hectares and address issues related to urban design and wellbeing of the population, flood mitigation, planned residential and commercial use, and security issues. Apart from plans to attract 4-star hotels and restaurants and parks and recreation facilities, a proposed furniture factory would help to improve local productivity, worker skills and family incomes. There are also plans to reinstate the use of the railway as a means of attracting tourists.




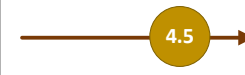




### 4. Pasir Mas Halal Park

The Pasir Mas Halal Park is located near the Rantau Panjang border crossing and has been described in section IV.G.5 above. Briefly, the Halal Park is located on an PMHP is developed on a 55 hectare site with a central marketing and processing complex which food-based products and an incubator center for small-size food processors. It concentrates on the production of additives and ingredients that have numerous applications from food additives for raw materials for the pharmaceutical industry and health care components. The close proximity to the Thai border will help to promote cross-border trade in halal products. At present, its facilities include a marketing center, an exhibition area for investors to showcase their products, business and marketing space to accommodate 36 SMEs, a one-stop center for investors, and 7 administration and management offices.



**Figure 8.11: SBEZ Assessment for Su Ngai Kolok - Rantau Panjang Border Crossing**

Ratings	Strengths	Drawbacks
Special Economic Zone	SEZ in Narathiwat is strategic objective of the IMT-GT 2012-2016 Roadmap.	Industries need to be attracted to site before area is fully developed.
 1 2 3 4 5	Halal industry development is integral to ECER masterplan.	Integrated cross-border cooperation in the development of Halal industry in Narathiwat and Kelantan will require technical assistance.
1 2 3 4 5	Rantau Panjang FTZ will greatly increase well-being of local population.	Border town development will require substantial investment and PPP commitment.
Value Chains	IMT-GT Roadmap targets cluster of value-added chains in Narathiwat and Kelantan.	Considerable technical assistance is needed to develop industrial clusters in area.
 1 2 3 4 5	Both Kelantan and Narathiwat are focused on their respective developed as center for halal food production.	Long-term commitment needed for industry's development could be undermined by changing government administrations.
1 2 3 4 5	Large opportunities for cooperation in halal products and services with Malaysia, Indonesia and Brunei Darussalam.	Considerable technical assistance is needed to explore diversified approach to halal services and products.
Transport & Logistics	Thai CIQ complex is being upgraded to accommodate expected traffic expansion.	Budgetary constraints could delay implementation.
 1 2 3 4 5	Second bridge planned to accommodate expected traffic expansion.	Budgetary constraints could delay implementation.
1 2 3 4 5	Railway project linking Su-ngai Kolok to the Malaysian district of Pasir Mas in order to promote Thai-Malaysian tourism.	Timeliness of rail traffic is low compared to that of trucks.
Socio-Econ Development	Malaysian and Thai governments are committed to development SEZ and support services.	Narathiwat security concerns are impediment to investment commitments by private sector.
 1 2 3 4 5	Rantau Panjang border town development would have a large positive impact of well-being of local population.	Large financial commitment is needed to implement planned area development.
1 2 3 4 5	Narathiwat Agricultural Market could facilitate trade in agricultural goods and services between Thailand and Malaysia.	Financial constraint could delay implementation.
SME Development & BDS	Networking among SMEs is well developed.	Self-sufficiency in BDS centers need technical assistance and financial commitments.
 1 2 3 4 5	Naradhiwas University has broad training and education areas of interest to SMEs.	Cost of training and education could impede businesses from utilizing resources.
1 2 3 4 5	Kelantan has good collaboration between businesses and government.	Access to financial capital is limited.
Linkages to Indonesia	Indonesia has large industry in development of halal industry.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.
 1 2 3 4 5	Learning centers in Narathiwat and Kelantan could attract Indonesian students.	Cost of training and education could impede students from accessing resources.
1 2 3 4 5	Large opportunities for Indonesian investors in agro-processing industry.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.

### C. Ban Buketa – Bukit Bunga Border Crossing Area

The Ban Buketa – Bukit Bunga checkpoint is the most recently developed border crossing between Kelantan State and Narathiwat Province. It was established when the bridge was built in 2007. On the Malaysian side, there are plans to establish Bukit Bunga as a cross-border trade and tourism center (ECERDC, 2014c). However, there plans are at a very preliminary stage of development.

#### 1. Cross-Border Trade

Data for the Ban Buketa – Bukit Bunga border crossing is unavailable.

#### 2. Transport and Logistics

**Thailand ICQ:** A new Thai customs office is under construction to replace the old one (Figure 8.12). However, it appears that construction of the site has been halted due to difficulties with the contractor. Thailand is developing the Buketa border checkpoint in Narathiwat as a logistics center to accommodate transport and trade with Malaysia. It is also promoting the use of the “Friendship Bridge” linking Thailand and Malaysia. The Friendship Bridge, formerly called “Buketa,” is the second bridge across the Golok River linking Ban Buketa in Narathiwat to Bukit Bunga in Kelantan state of Malaysia. The bridge was opened in 2007 to mark the 50th anniversary of Thai-Malaysian diplomatic relations.

**Figure 8.12:** Ban Buketa Border Crossing with Existing Facilities and Those under Construction



Source: Photos by the authors.

**Malaysian ICQS:** The complex was established in 1997 and it expanded its operations when the Friendship Bridge was constructed in 2007. Since then, a new complex has been built, with 96 officials currently operating the facilities. The main operations are directed at controlling passenger and heavy vehicle traffic, both of which have been rising steadily since 2008 (Royal Malaysian Customs (2014b).







**Figure 8.12:** Bukit Bunga New ICQS Facilities



Source: Photos by the authors.



**Figure 8.13: SBEZ Assessment for Buketa Border-Crossing Area**

Ratings	Strengths	Drawbacks
Special Economic Zone	SEZ in Narathiwat is one of the strategic objectives of the IMT-GT 2012-2016 Roadmap.	The location of the proposed SEZ site is far from the Buketa crossing.
 1 2 3 4 5	SEZ is integral to East Coast Economic Region (ECER) masterplan of Malaysia.	Delays in implementation of Narathiwat SEZ could undermine integrated development.
1 2 3 4 5	Bukit Bunga could be developed into a FTZ as a trade and tourism center.	Plans are initial phase of development.
Value Chains	IMT-GT Roadmap targets cluster of value-added chains in Narathiwat.	Considerable technical assistance is needed to develop industrial clusters in area.
 1 2 3 4 5	Narathiwat to be developed as center for halal food production.	Long-term commitment needed for industry's development could be undermined by changing government administrations.
1 2 3 4 5	Large opportunities for cooperation in halal products and services with Malaysia, Indonesia and Brunei Darussalam.	Considerable technical assistance is needed to explore diversified approach to halal services and products.
Transport & Logistics	A new Thai ICQ is being constructed to replace the aging facility at the bridge.	Construction appears to have been halted due to difficulties with the contractor.
 1 2 3 4 5	Plans for a new logistics center are underway.	There is limited road access to the border crossing.
1 2 3 4 5	New plans are underway to upgrade the bridge.	Information on the upgrade is unavailable.
Socio-Econ Development	Government is committed to development SEZ and support services.	Security concerns are impediment to investment commitments by private sector.
 1 2 3 4 5	Thai and Malaysian government plans support needed soft and hard infrastructure for SBEZ and FTZ.	Financial constraints could delay implementation of some projects.
1 2 3 4 5	Thai and Malaysian government plans contain border town development.	Financial constraints could delay implementation.
SME Development & BDS	Networking among SMEs is well developed.	Self-sufficiency in BDS centers need technical assistance and financial commitments.
 1 2 3 4 5	Princess of Naradhiwas University has broad training and education areas of interest to SMEs.	Cost of training and education could impede businesses from utilizing resources.
1 2 3 4 5	Good collaboration between businesses and the provincial government.	Access to financial capital is limited.
Linkages to Indonesia	Indonesia has large industry in development of halal industry.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.
 1 2 3 4 5	Princess of Naradhiwas University could attract Indonesian students.	Cost of training and education could impede students from accessing resources.
1 2 3 4 5	Large opportunities for Indonesian investors in agro-processing industry.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.

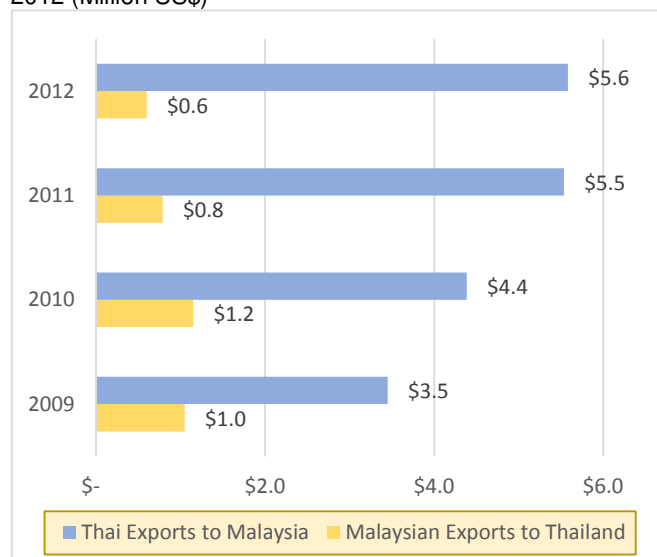
## D. Takbai - Pengkalan Kubur Border Crossing Area

On the Malaysian side, the town of Pengkalan Kubur is situated in the district of Tumpat. It is about 23 kilometers from Kota Bharu city. It has a small population of nearly 6,800 that are mainly occupied in the agricultural, trading and service sectors. There is a small free trade area (FTA) that caters to tourists. On the Thai side is Takbai, which has a larger population of around 17,000. It has a busy fresh fruits and vegetable market that is used by Malaysians from Pengkalan Kubur.

### 1. Cross-Border Trade

Thai exports to Malaysia through the Takbai border checkpoint are much larger than Malaysian exports to Thailand, though the amount of trade is much lower than that through Su-ngai Kolok – Rantau Panjang (Figure 8.14). In 2012 the value of Thai exports was US\$ 5.6 million, and the value of Malaysian exports US\$ 0.6 million. The resulting Thai trade surplus is likely to widen under current trading conditions since Thai exports in 200-2012 grew at an average annual rate of 18 percent, whereas Malaysian exports decline by an average of 15 percent a year. Information on the composition of trade is consolidated data from both the Takbai – Pengkalan Kubur and Su-ngai Kolok – Rantau Panjang border crossings is discussed in the section describing the Su-ngai Kolok – Rantau Panjang border crossing (Figure 8.6 above).

**Figure 8.14:** Takbai – Pengkalan Kubur Cross-Border Trade, 2012 (Million US\$)



Source: Department of Foreign Trade, Ministry of Commerce, Royal Thai Government; and Royal Malaysian Customs.

### 2. Transport and Logistics

Development of the Takbai–Pengkalan Kubur road link will involve the construction of a bridge spanning the Golok River and the construction of new CIQ facilities. The bridge will replace the existing ferry service and thereby provide a more efficient means of crossing the river. At present there are two forms of boat transportation, the first being two ferries that carry cars and small trucks, the second being small boats that ferry people across the river (Figure 8.15). A bridge should greatly increase cross-border economic opportunities, and contribute to the regional development plans in both Malaysia and Thailand.

**Thailand CIQ:** Facilities are limited and are mainly used for issuance of visas for immigration formalities. A full-scale CIQ facility has already been planned for the site at the proposed new bridge.

**Malaysia ICQS:** The complex has 73 officials that are mainly occupied in customs and enforcement. The control imports that are mainly in the form of fruits and vegetables, textile products, plastic and glassware, and fresh fish that are mainly used by the local population. Exports are limited to diapers, used clothing and fresh fish. Enforcement activities are in the form of land and water patrolling of petty smuggling activities that have been traditionally carried out over generations. In 2013 the value of seizures was over US\$ 50,000.

**Figure 8.15:** Existing Takbai – Pengkalan Kubur Ferry Transportation Modes



Source: Photos by Pengkalan Kubur Customs and the authors.

### 3. Pengkalan Kubur Border Town Development

Plans have been completed for a 619 hectare area that includes the border town of Pengkalan Kubur (Town and Country Planning, 2014). The aim is to improve the gateway image of the area, the urban structure and design, physical living conditions for the local population, and public facilities and amenities. It also intends to create a unique identity for the area that will attract tourists and businesses. Moreover, the plan intends to address flooding issues in the town that were previously not dealt with due to budget limitation. Finally, it addresses the lack of competitiveness of the Pengkalan Kubur FTZ relative to that of Rantau Panjang, where there is a greater variety of goods offered to customers.

**Figure 8.16:** Pengkalan Kubur Border Town Development Plan

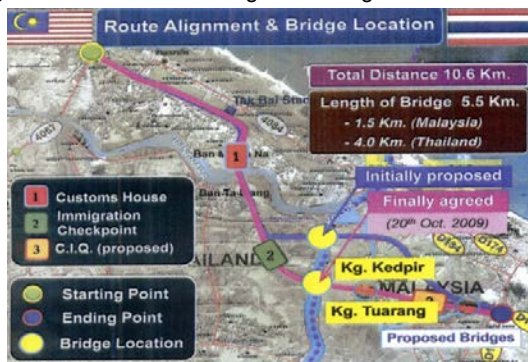


Source: Town and Country Planning (2014).

### 4. Proposed Bridge at Pengkalan Kubur – Takbai.

Two feasibility studies that have been carried out for the proposed bridge connecting Proposed Bridge at Pengkalan Kubur to Takbai, and Malaysia will complete a detailed design for the bridge and its approach by 29 Aug 2014 (Figure 8.17). The estimated budget for the construction of the 7 kilometer bridge is US\$ 217 million (Highway Planning Commission, 2014).







**Figure 8.17:** Planned Bridge Crossing at Takbai – Pengkalan Kubur and Visit to Proposed Bridge Site



Source: Photos by Highway Planning Commission and the authors.



**Figure 8.18: SBEZ Assessment for Pengkalan Kubur – Takbai Border Crossing**

Ratings	Strengths	Drawbacks
Special Economic Zone	SEZ in Narathiwat is one of the strategic objectives of the IMT-GT 2012-2016 Roadmap.	Resources could be shifted to another border area.
 1 2 3 4 5	Halal industry development is integral to ECER masterplan.	Integrated cross-border cooperation in the development of Halal industry in Narathiwat and Kelantan requires technical assistance.
1 2 3 4 5	Larger Pengkalan Kubur FTZ would greatly increase well-being of local population.	Competition from FTZ in Rantau Panjang due to wider selection of goods.
Value Chains	IMT-GT Roadmap targets cluster of value-added chains in Narathiwat and Kelantan.	Considerable technical assistance is needed to develop industrial clusters in area.
 1 2 3 4 5	Both Kelantan and Narathiwat are focused on their respective developed as center for halal food production.	Long-term commitment needed for industry's development could be undermined by changing government administrations.
1 2 3 4 5	Large opportunities for cooperation in halal products and services with Malaysia, Indonesia and Brunei Darussalam.	Considerable technical assistance is needed to explore diversified approach to halal services and products.
Transport & Logistics	A bridge linking Takbai to Pengkalan Kubur will greatly facilitate cross-border transportation of goods and people.	Controversy remains over the impact of that the bridge could have on the marine fauna.
 1 2 3 4 5	Malaysian and Thai CIQ facilities will be constructed along the new bridge.	Budgetary constraints could delay the project.
1 2 3 4 5	The border crossing is close to the proposed SEZ site.	There are currently better facilities at the Sungai Kolok border crossing.
Socio-Econ Development	Thai Government is committed to SEZ and support services.	Security concerns are impediment to investment commitments by private sector.
 1 2 3 4 5	Malaysian and Thai governments are committed to Halal industry.	Financial constraints could delay implementation of some projects.
1 2 3 4 5	Development of the Narathiwat Agricultural Market is expected to facilitate trade in agricultural goods and services between Thailand and Malaysia.	Financial constraint could delay implementation of the Narathiwat Agricultural Market.
SME Development & BDS	Networking among SMEs is well developed.	Self-sufficiency in BDS centers need technical assistance and financial commitments.
 1 2 3 4 5	Learning centers in Narathiwat and Kelantan have broad training and education areas of interest to SMEs.	Cost of training and education could impede businesses from utilizing resources.
1 2 3 4 5	Good collaboration between businesses and the Malaysian and Thai governments.	Access to financial capital is limited.
Linkages to Indonesia	Indonesia has large industry in development of halal industry.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.
 1 2 3 4 5	Princess of Naradhiwas University could attract Indonesian students.	Cost of training and education could impede students from accessing resources.
1 2 3 4 5	Large opportunities for Indonesian investors in agro-processing industry in Kelantan and Narathiwat.	Businesses in Sumatra subregion of IMT-GT would need technical support in guiding investments.

## **PART IV. SUMMARY AND CONCLUSIONS**



## IX. COMPARATIVE BORDER CROSSING RATINGS

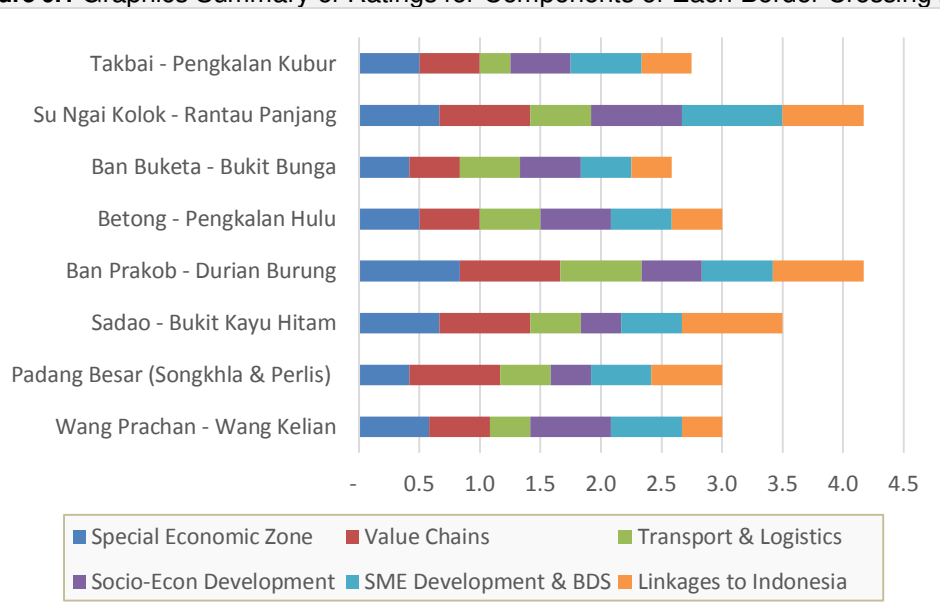
### A. SBEZ Ratings

SBEZs are difficult to successfully implement because they seek to address broader socio-economic development goals than purely commercial SEZs near major gateways. For that reason, they need an integrated rather than piecemeal approach to their design and operation. In the case of the Thai-Malaysian border area, best international practices suggest an all-inclusive approach to the development of the targeted border area, taking into account interconnected cluster developments in a subregion. Indeed, an optimal approach would be to develop each area along the border within the context of its contribution to other border crossing areas. This approach would give rise to a comprehensive networking approach to border development so that economies of scale are derived from complementary cross-border activities and inter-border crossing activities.

In practice, however, technical and financial limitations may prevent the adoption of a comprehensive approach. Technically, the lack of a clear understanding on the part of local and sub-regional government agencies and private sector groups would suggest the need for a pilot SBEZ project along one border crossing areas, which in and of itself requires considerably networking of activities within the sub-region and with linkages to the Indonesian sub-region covered by the IMT-GT. Such an approach could produce practical benefits otherwise not available in an all-inclusive approach. But it would, by its inherently limited approach, be unable to achieve the full benefits of scale economies that could otherwise be derived from a comprehensive approach to border development.

Figures 9.1 and 9.2 present the graphics and table ratings summary of information contained in Part III of this report. The results show that there are two border crossing areas with the highest ratings: The first is the Su-ngai Kolok – Rantau Panjang in Narathiwat Province of Thailand; the second is the Ban Prakob – Durian Burung border crossing area in Kedah State of Malaysia and

**Figure 9.1** Graphics Summary of Ratings for Components of Each Border Crossing Area



**Figure 9.2:** Table Summary of Ratings for Components of Each Border Crossing Area

	Wang Prachan - Wang Kelian	Padang Besar (Songkhla & Perlis)	Sadao - Bukit Kayu Hitam	Ban Prakob - Durian Burung	Betong - Pengkalan Hulu	Ban Buketa - Bukit Bunga	Su Ngai Kolok - Rantau Panjang	Takbai - Pengkalan Kubur
<i>Special Economic Zone</i>	3.5	2.5	4.0	5.0	3.0	2.5	4.0	3.0
<i>Value Chains</i>	3.0	4.5	4.5	5.0	3.0	2.5	4.5	3.0
<i>Transport &amp; Logistics</i>	2.0	2.5	2.5	4.0	3.0	3.0	3.0	1.5
<i>Socio-Econ Development</i>	4.0	2.0	2.0	3.0	3.5	3.0	4.5	3.0
<i>SME Development &amp; BDS</i>	3.5	3.0	3.0	3.5	3.0	2.5	5.0	3.5
<i>Linkages to Indonesia</i>	2.0	3.5	5.0	4.5	2.5	2.0	4.0	2.5
<b>Mean Average</b>	<i>3.0</i>	<i>3.0</i>	<i>3.5</i>	<i>4.2</i>	<i>3.0</i>	<i>2.6</i>	<i>4.2</i>	<i>2.8</i>

Songkhla Province of Thailand. However, they reflect considerable differences in the valuation of parameters for each of the components. Ban Prakob – Durian Burung border crossing has new modern customs facility on both sides, a four lane highway that is currently being completed on the Thai side, and an excellent roadways on the Malaysian side of the border. The area around the border on the Thai side has been designated for farmland and natural preserves, and there could therefore be sensitivity on the part of the local population to the establishment of an SEZ in the border area. Development of part of the SBEZ could, however, be located farther inland, which might eliminate those possible drawbacks.

The Su-ngai Kolok – Rantau Panjang border crossing area already has a designated SBEZ site on the Thai side that is acceptable to the local population, and there is a modern customs facility at the border with good roadway access. On the Malaysian side, there is widespread interest in collaborating with Thailand in the Halal industry along with furniture and wood processing industries, tourism and agriculture and agro-processing. Moreover, per capita GPP of Narathiwat Province is only half of that in Songkhla Province, and the GDP of Kelantan State is nearly half of that in Perak State. Since an SBEZ is largely motivated by socio-economic development concerns rather than purely commercial interests, there is good reason to establish an SBEZ in this area. However, Narathiwat continues to have security concerns that could create a disincentive for businesses to locate in the area, and implementation of an SBEZ would require concerted actions to ensure security in the area.

The Sadao – Bukit Kayu Hitam border area in Songkhla Province of Thailand and Kedah State of Malaysia has the next highest ratings. There is a great deal of commercial activity in these areas and, for Thailand, the volume of cross-border trade is the higher than that of any other border in the country. On the Malaysian side, there is large scale development underway of a broad-based industrial park, border town development, support industries and a new ICQS complex. On the Thai side, however, the area is highly congested and the population has the highest GPP in the southern border provinces. These differences, as well as those in the other locations, need to be

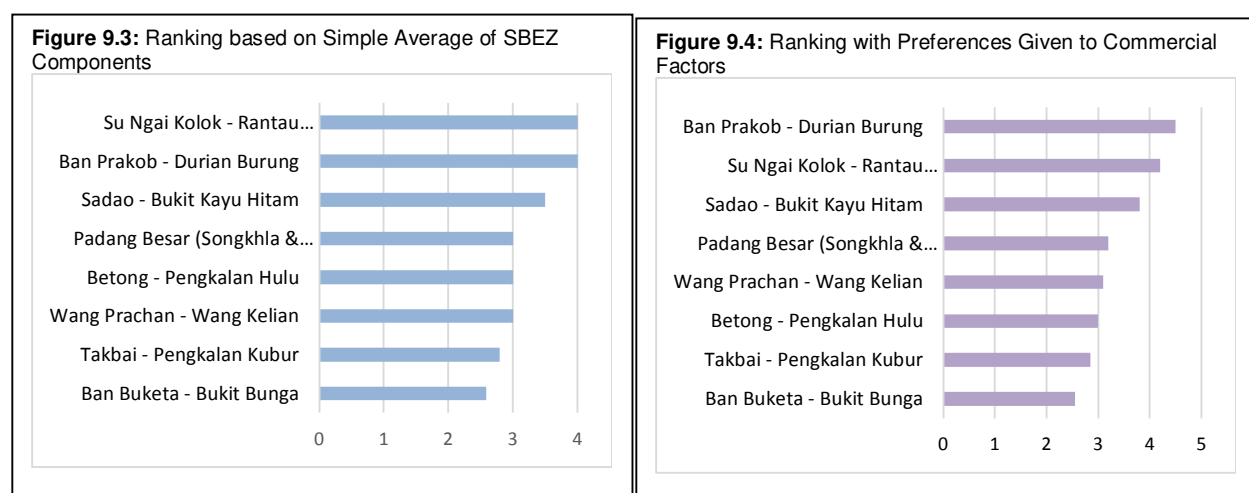
weighed when determining the viability of establishing an SBEZ that will effectively address the needs and interests of the project stakeholders.

There are two other border crossings that should be considered for their SBEZ viability. The first is the Wang Prachan - Wang Kelian border crossing in Satun Province of Thailand and Perlis State of Malaysia. Both the Thai province and the Malaysian province have low per capital incomes that would greatly benefit from the project. Moreover, the border crossing has already progressed to the second stage of an SBEZ where a common border area is informally managed by the countries on each side of the border. There is also a strong motivation for promoting an SBEZ in this area because of its focus on eco-tourism and the integration of commercial activities in a style that would have low environmental impact and be designed in a way that is integrated into its environment and maintains its local cultural heritage. The second border crossing is that of Betong – Pengkalan Hulu in Yala Province of Thailand and Perak State of Malaysia. A similar approach is being followed to that of Wang Prachan – Wang Kelian in terms of commercial development within an attractive eco-tourism environment, and its proximity to Penang makes it an attractive destination for tourists and persons seeking a second residence.

## B. Ranking with Commercial versus Welfare Preferences

The results of the border crossings ranking in the previous section are based on the mean average of the SBEZ components that underlie the analysis. In this section, we present three sets of results based on a preference ordering. The first is a ranking based on commercial preferences, in which the potential for developing SEZs and value chains in the border area are given preference over other components. Those commercial preference components are assigned weights that are three times higher than those of the other components

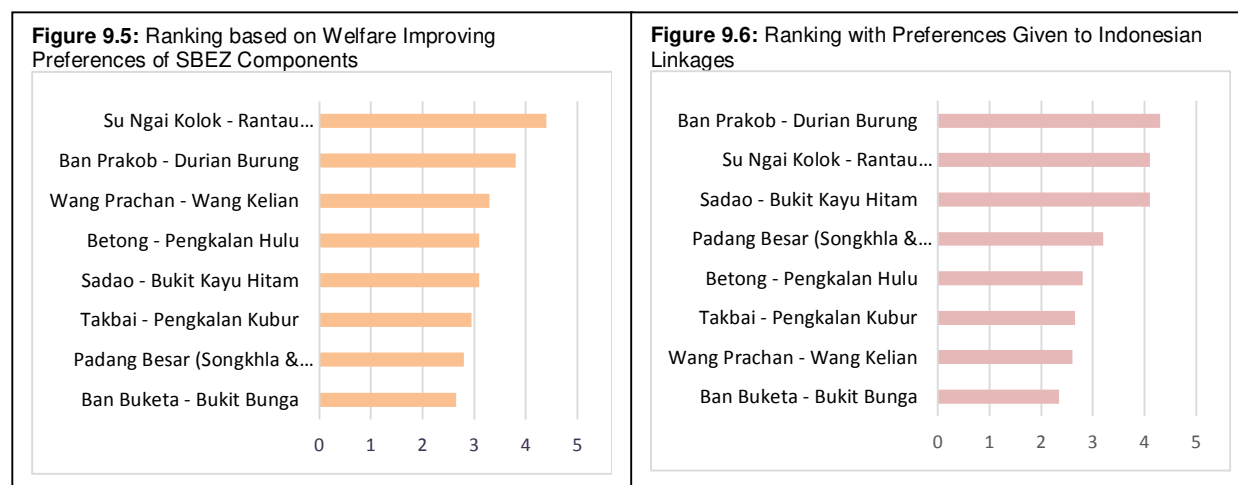
The first ranking (Figure 9.3) is based on a simple mean average of the SBEZ components. The resulting ranking is the same as those in Figures 9.1 and 9.2. Next, Figure 9.4 shows the ranking that occurs when the potential for developing SEZs and value chains in the border area are given preference over other components.<sup>14</sup> In this case, Ban Prakob – Durian Burung border area has a clear advantage over Su Ngai Kolok - Rantau Panjang. Also, Padang Besar has a somewhat higher rating than Wang Prachan – Wang Kelian and Betong – Pengkalan Kubur.



<sup>14</sup> The components for 'special economic zone' and 'value chains' are multiplied by a factor of 3 and the overall average normalized to a scale of 0 to 5 using the formula  $y = \sum X_i / 10$ , where the preferred components are weighted by a factor of 3.

In contrast, when socio-economic and SME development factors are given preference over purely commercial interests, then Figure 9.5 shows that the Su Ngai Kolok - Rantau Panjang has a clear advantage over the Ban Prakob – Durian Burung border area.<sup>15</sup> Also, Wang Prachan - Wang Kelian moves up two position to become the third highest rated border crossing area.

The final ranking is based on an ordering where Indonesian linkages to the SBEZ are given preferences.<sup>16</sup> The results show that Ban Prakob –Durian Burung would have the highest rating, followed by similar rankings for Su Ngai Kolok - Rantau Panjang and Sadao – Bukit Kayu Hitam.



<sup>15</sup> The components for 'socio-economic development' and 'SME development and BDS' are multiplied by a factor of 3 and the overall average normalized to a scale of 0 to 5 using the formula  $y = \sum X_i/10$ , where preferred components are weighted by a factor of 3.

<sup>16</sup> The component for 'linkages to Indonesia' is multiplied by a factor of 5 and the overall average normalized to a scale of 0 to 5 using the formula  $y = \sum X_i/10$ , where preferred component is weighted by a factor of 5.



## **X. NEXT STEPS**

Specific recommendations for the scope and coverage of the Comprehensive SBEZ Study must await the decision of the TF-SBEZ on the possible location(s) of the SBEZ. Generic coverage of the tasks to be carried out under the Comprehensive SBEZ Study have been discussed in the Pre-Inception Study and it recognizes the progress already made in the strategic development plans for the area under the Thailand-Malaysia Joint Development Strategy for Border Areas (JDS). Those plans include training and skills development, social improvement and gender equality programs, improved delivery of local government services to businesses, provision of access to capital and finance to SMEs, support for the development of business and trade associations, provision of business advisory services, support for research and development, and programs to strengthen security in the area. Additionally, the generic coverage of the Comprehensive SBEZ Study recognizes that border development plans are also being formulated by business organizations under the joint Thailand-Malaysia Business Council (TMBC) and Malaysia-Thailand Business Council (MTBC) framework.

Having determined the spatial location of the SBEZ, the IMT-GT Special Border Economic Zones Special Implementation Task Force (TF-SBEZ) may next wish to address the specific components that will need to be covered for the design and implementation of the SBEZ site itself and the strategic development for the area. Those components will probably need to encompass three dimensions: (a) hard and soft infrastructure inside the site; (b) connectivity infrastructure to subregional markets and international gateways; and (c) local socio-economic development plans. Site infrastructure requirements will depend on the proposed cross-border collaboration in sectors or industries and the types of targeted investments for the SBEZ, while connectivity is largely associated with transport infrastructure, trade facilitation and logistics services along the IMT-GT corridors. In connection with trade facilitation, the TF-SBEZ may wish to consider the inclusion of pilot projects along the border of the type being implemented under the GMS Cross-Border Trade Agreement (CBTA), as discussed in Chapter II of this report, that would address existing delays in some of the Thai-Malaysian border crossing due to large transportation volumes and the lack of integrated customs and immigration information, along with separate inspection facilities. A Single-Stop Inspection (SSI) mechanisms could be piloted in the selected location(s) of the SBEZ along the Thai-Malaysian border in order to allow border control authorities from the two countries to jointly conduct one-stop inspections in the same facility. This approach would be covered under the type of formal cross-border collaboration at Level 3 of the SBEZ roadmap discussed in Section II.C above.

Possibly the most challenging dimension of the SBEZ is that of the socio-economic development for the area. Left to itself as a by-product of the growth of company operations in the site, trickle down effects of investments in the SBEZ are unlikely to produce sufficient advancements in training and education for workers, improvements in gender equality, and SME business development opportunities. Companies are often hesitant to invest in skills training programs because they fear that workers will be drawn away by competing enterprises after being trained. And SME often lack the capital and know-how to develop business opportunities that will allow them to operate within a zone or provide support services to large enterprises in the zone. At issue is how to consolidate the wide range of social and economic objectives for the border area into a few programs that are able to address all objectives established by the Thailand-Malaysia JDS. In this regard and before making a final determination as to the location(s) of the SBEZ, the TF-SBEZ may wish to carry out a sensitivity analysis based on a perception survey of the local population along the border about their attitudes of an SBEZ in their area.

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## ANNEX A: TERMS OF REFERENCE FOR SCOPING STUDY

<b>Project</b>	TA-6462 REG: Institutional Development for Enhanced Subregional Cooperation in the aSEA Region - Regional Development Economist-Lead (Special Border Economic Zones) (41345-012)
<p><b>Objective and Purpose of the Assignment</b></p> <p>The proposal has its origins in the Joint Development Strategy Working Group (JDS WG), a bilateral initiative between the governments of Malaysia and Thailand to promote sustainable and inclusive development along their common border. Individual studies for a SBEZ at the border region of Sadao, Thailand and Bukit Kayu Hitam, Malaysia were completed by end-2009, and a special task force was established to compile and integrate these different studies. The ensuing JDS Project Coordinators task force recommended that a joint feasibility study for a Special Border Economic Zone (SBEZ) at Sadao – Bukit Kayu Hitam be undertaken.</p> <p>At the 7th IMT-GT Summit in Brunei Darussalam, on 25 April 2013, the Leaders identified the proposed SBEZ as a Signature Project. The proposal was further discussed at the IMT-GT Ministerial Meeting in Ko Samui on 13 September 2013. There, Ministers recommended that the SBEZ study also include Indonesia through IMT-GT's existing transport and economic corridors. As the regional development adviser, ADB was requested to help conduct an initial scoping study (Scoping Study) for the Malaysian – Thailand SBEZ, exploring possible linkages between Malaysia, Thailand and Indonesia.</p> <p>ADB's involvement was requested because the individual studies did not adequately capture element for an SBEZ that encompasses Malaysia, Thailand and Indonesia. More specifically, the individual studies did not fully address: (i) cross-border physical connectivity constraints and opportunities; and (ii) how to reconcile differences in governing policies.</p> <p>As a prelude the larger in-depth SBEZ study (SBEZ study), the Scoping Study intends to determine the scope and objective for the SBEZ Study which would be designed to:</p> <ol style="list-style-type: none"> <li>Promote greater trade and investments within ASEAN in general, and between IMT-GT Member Countries in particular;</li> <li>Quantify the direct measurable benefits an SBEZ can provide the communities on both sides of border;</li> <li>Develop a sustainable pipeline of sub-regional projects and further provide the means to catalyze financing for infrastructure for roads, border towns, border facilities, and industrial parks; and</li> <li>Determine the complimentary soft infrastructure requirements, including compatible regulatory frameworks, cross-border synergies in trade, resources and livability conditions.</li> </ol> <p><b>Scope of Work</b></p> <p>The Scoping Study will thus develop a detailed terms of reference (TOR) for the SBEZ Study. The Scoping Study will prioritize (i) an audit of the individual studies already conducted in order to build on these studies, and emulate the success of other subregional frameworks; (ii) the wider potential and impact of a SBEZ, in particular the inclusion of Indonesia through IMT-GT's transport and economic corridors; and (iii) a stock-take of existing ASEAN</p>	

incentives or incentives in agreements yet to be ratified by all ASEAN Member States.

The scoping study will therefore leverage on the unique complementary characteristics nature of the Malaysian –Thailand border. For example most of Southern Thai trade is coursed through the Malaysian border to the Penang port; Malaysians make up the bulk of tourists in Hatyai, Betong, Sg. Golok; and retail trade and commerce is based on family ties relationships that go back a long way. Recommendations should consequently accentuate opportunities to develop more synergistic collaboration (e.g., trade & logistics, manufacturing) in selected, high potential border areas, e.g., as in the Bukit Kayu Hitam – Sadao border crossing.

On the latter, recommendations should also include ways and measures to facilitate border clearance processes to ensure cost effective logistics as part of the cross-border collaboration efforts. To this end, the Scoping Study should also refer to existing incentives in ASEAN that the SBEZ can be either reinforced, or identified for incorporation.

The inclusion of Sumatra's nexus with the SBEZ provides the opportunity to revitalize the IMT-GT's connectivity corridors covering the extended Songkhla-Penang-Medan corridor; and measures to link the Straits of Malacca Corridor with that of the Melaka-Dumai Economic Corridor

#### **Detailed Tasks and/or Expected Output**

The Scoping Study will provide recommendations on the way forward for the SBEZ Study for IMT-GT Ministers' consideration by the 8th IMT-GT Summit in April 2014. This will involve stakeholders' consultations meetings in the lead up to the Summit.

The consultant will do the following:

- a. An audit of the studies already conducted in order to build on these studies, and emulate the success of other subregional frameworks. In doing so it should identify successful border town pairs in regions that are comparable to IMT-GT;
- b. Stock take the relevant ASEAN agreements (including ASEAN FTAs) that can be applied, and earmarked for early adoption by the SEBZ ahead of ASEAN;
- c. Determine the extent, breath and scope of factors that should be incorporated and subsumed into the larger in-depth SBEZ Study including potentially the following:
- d. Infrastructure to facilitate operations and movements of goods and labor. For example, examine connectivity infrastructure (hard and soft) between the Malaysia-Thailand Border area and surrounding tourist areas in Thailand and with the economic zones in Peninsular Malaysia;
- e. Favorable regulatory environments especially ease of doing businesses (tax regime, labor movement and labor laws, laws governing coastal areas, land laws. For example, border clearance procedures and the examination on the range of policies needed to encourage relocation of intermediate processing centers from other areas in Southeast Asia to the Malaysia-Thailand Border;
- f. Opportunities for cross-border synergies, including resources, expertise, capital and labor, in complementary activities through cultural similarities;
- g. Sectors with natural competitive advantages, including leveraging on synergistic SME value-chains, cost advantages from 'cluster ecosystems'; as a means to define market potential and identify potential activities for the SBEZ;
- h. Governance issues including early alignment of priorities, consistency of policy/regulatory direction, federal-local authorities' nexus and joint public-private governance; and

- i. Livability, inclusive opportunities including alignment in the conditions for wage, work, live, cross-border recreational, housing and education.
- j. Determine the modality for the inclusion of Indonesia into the SBEZ study, through IMT-GT's designated transport and economic corridors. This may require the larger study to relook at, and revitalize IMT-GT's designated transport corridors;
- k. Design and conduct of a stakeholders workshop to engage the findings of the draft final report; and
- l. Support the IMT-GT and ADB in other activities relevant to the TA.



## ANNEX B: ACTIVITIES CARRIED OUT

**Timeframe:** The Scoping Study was implemented in three phases:

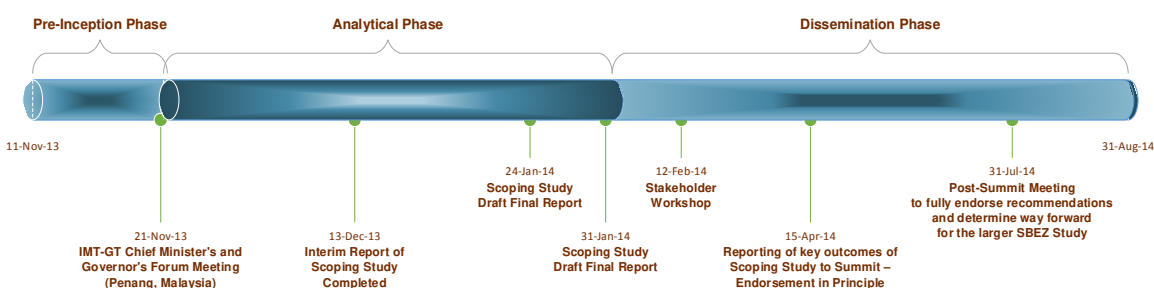
*Phase 1 – Pre-Inception and Inception* (15-31 November 2013): The pre-inception period was carried out during the first part of November 2013 for presentation on 21 November 2013 to the IMT-GT Chief Minister's and Governor's Forum Meeting in Penang, Malaysia. Following the meeting and initial stocktaking, a field visit to the Thai-Malaysian border area is planned for 25-29 November 2013. Based on that work and the results of the Meeting, priority activities were identified, concepts and coverage defined, and an implementation plan prepared for the Inception Report.

*Phase 2 – Analysis* (1 December 2013 to 31 January 2014): The second phase involved the analysis and write-up of the Scoping Study. It began with the second phase of field work on the Malaysia-Thai border and finish with the completion of the draft final report for the Scoping Study.

*Phase 3 – Dissemination* (1 February 2014 to 30 April 2014): The third phase involved dissemination and consultations with stakeholders. Those consultations took place between the end of January and end of April 2014, and included a workshop to engage stakeholders in the strategic planning process for the SBEZ Study.

**Schedule for Preparation of Scoping Study:** Preparation of the Scoping Study took place between mid-November 2013 and 31 January 2014. As Figure 6.2 shows, there are seven major activities. For the Inception Phase, they consist of (a) preparation of the Pre-Inception Report; (b) presentation of the Pre-Inception Report to the IMT-GT Chief Minister's and Governor's Forum

**Figure 6.1: Timeline for Scoping Study**



Meeting; (a) field visit to the Thai-Malaysian border area; and (d) preparation of the Inception Report. For the Analytical Phase, they consist of (a) preparation and deliver of the Interim Report; (b) preparation and deliver of the Draft Final Report; and (c) preparation and delivery of the Final Scoping Report. Figure 6.3 presents the detailed work plan for the Scoping Study's implementation and dissemination.

**Mobilization: Staffing:** The Scoping Study started with the contracting and notice to proceed by the international regional development expert, Dr. Montague Lord, and national consultant on regional development, Dr. Pawat Tangtrongjita. Dr. Pawat is also working on a country-wide study of Special Economic Zones (SEZs) with the National Economic and Social Development Board (NESDB) of Thailand and will leverage that activity in his work for the Thai-Malaysian SBEZ.

**Figure B.1:** Fieldtrip Agenda for Thai Side of Border, 2 – 7 March 2014

Date	Program	Remarks
Sunday, 2 March 2014	BKK – Hatyai - Satun	
08:50 am.	Meet at Suvarnabhumi Airport	
09:50 am.	Depart to Hatyai TG 2233	
11:20 am.	Arrive at Hatyai	
11:30 am.	Lunch at Airport	
12:00 pm.	Depart to Wang Prachan (Satun)	Nitichai 081 897 6621
15:00 pm.	Arrive at Wang Prachan	
15:00-17:00 pm.	Site Visit and meet with custom and local authority	Confirmed
17:00 pm.	Depart to Hat Yai	
19:30 pm.	Check in Hat Yai Centara Hotel	074 352 222
Monday 3 March 2014	Hatyai	
08:00 am.	Depart to Sadao Border Pass	
08:45 am.	Arrive at Sadao Border Pass	
08:45-10:45 am.	Site visit and meet with custom and local authority	
10:45-11:45 am.	Arrive at Padang Besar Border Pass	
12:00 am.	Lunch	
13:00-15:00 pm.	Site Visit and meet with local authority	
15:00 pm.	Depart to Hatyai	
16:00-17:30 pm.	Meet with Songkhla authority and CCI	Thanarak 081 8730550
17:30 pm.	Stay in Hatyai Centara Hotel	Confirmed
Tuesday 4 March 2014	Hatyai – Betong (Yala)	
08:00 am.	Depart to Ban Prakob	
08:30 am.	Arrive at Ban Prakob Border Pass	
08:30-10:30 am.	Site Visit and meet with custom and local authority	
10:30 am.	Across border and travel to Betong (Yala Province)	Travel on Malaysia side
13:00 pm.	Arrive at Betong Border Pass	
13:30-15:30pm.	Site Visit and meet with custom and local authority	
17:30 pm.	Stay at Grand Mandarin Betong Hotel (฿1,480)	073 235 777
Wednesday 5 March 2014	Betong – Ban Buketa (Narathiwat)	
08:30 am.	Depart to Ban Buketa	Travel on Malaysia side
13:00 pm.	Arrive at Ban Buketa	
13:30-15:30 pm.	Site Visit and meet with custom and local authority	
15:30 pm.	Depart to Sungai Kolok	
18:00 pm.	Stay at Kalantan State	Kota Bharu
Thursday 6 March 2014	Su-ngai Kolok (Narathiwat)	
08:30 am.	Depart to Su-ngai Kolok Border Pass	
10:30 am.	Arrive at Su-ngai Kolok Border Pass	
10:30-12:30 pm.	Site Visit and meet with custom and local authority	
13:30 pm.	Depart to Taki Bai Border Pass	
14:30 pm.	Arrive at Takbai Border Pass	
14:30-16:30 pm.	Site Visit and meet with custom and local authority	
16:30 pm.	Depart to Narathiwat (Muang District)	
17:00 pm.	Stay at Imperial Hotel, Narathiwat Province	074 515 041
Friday 7 March 2014	Narathiwat – Bangkok	
8:30 am.	Meeting with Narathiwat Authority	
10:30 am.	Depart to Narathiwat Airport	
12:25 pm.	Depart to BKK by FD	
13:55 pm.	Arrive at Don Muang Airport	

**Figure B.2: Fieldtrip Agenda for Malaysian Side of Border, 30 March – 4 April 2014**

Sunday 30 March 2014	Monday 31 March 2014	Tuesday 1 April 2014
08.00 am	08.00 am	08.00 am
Move from Hotel Seri Malaysia, Perlis to Wang Kelian	Check-out from Hotel Seri Malaysia, Perlis to Bukit Kayu Hitam, Kedah	Move from Hotel in Pengkalan Hulu to CIQ Pengkalan Hulu, Perak
09.00 am – 12.00 pm.	09.00 am – 12.00 pm.	
Visit Wang Kelian (Perlis State, Malaysia)	Visit Bukit Kayu Hitam (Kedah State), Meet Custom, Immigration and local Authorities	
Meet Custom, Immigration and local Authorities.	<u>Activities</u>	
	Briefing and presentation by;	09.00 am – 12.00 pm.
<u>Activities</u>	1. Immigration officer;	
Visit to Kedai Bebas Cukai : Green	2. Northern Corridor Implementation Authority (NCIA);	Visit to Pengkalan Hulu, Perak CIQ, proposed Special Border Economic Zone site and interaction with officials
Visit to Arked Niaga	3. Question and Answer session	
Visit to State Park Chalet	13.00 pm	
Lunch at hall in State Park Chalet	Move from Bukit Kayu Hitam to Durian Burung	<u>Activities</u>
14.00 – 17.00 pm.	14.00 – 17.00 pm.	Briefing and presentation by;
Visit Padang Besar (Perlis State)	Visit Durian Burung/from Kuala Nerang (Kedah),	4. Pengkalan Hulu Local Authority
Meet Custom, Immigration and local Authorities	Meet Custom Immigration Authorities.	- Briefing on local plan
	Briefing and presentation by;	5. The Bordertown Gateways
<u>Activities</u>	1. Tradewinds Plantation Berhad;	- Briefing on proposed Special Border Economic Zone
Visit to Padang Besar ICQ	2. Question and Answer session	6. Question and Answer session
Visit Malaysia's double track railways		14
Visit Halal Park		
Wednesday 2 April 2014	Thursday 3 April 2014	Friday 4 April 2014
08.00 am	8.30 am	Check-out from Hotel and Depart from Pengkalan Chepa, Kelantan Airport to Kuala Lumpur
Check-out from Hotel in Pengkalan Hulu, Perak and move to Bukit Bunga, Kelantan	Move from Hotel in Kota Bharu to ECERDC office in Kota Bharu	
10.00 – 11.00 am.	8.40 am – 10.45am	
Site Visit to Bukit Bunga ICQS facilities and briefing by ICQS official on border security and customs matters	Visit ECERDC office	
	<u>Activities</u>	
11.00 – 12.30 pm	Briefing and presentation by;	
Discussion with relevant agencies on Malaysia side and visit to relevant economic activities around	1. UPEN Kelantan/ECERDC/ Local Government Representatives and	

Bukit Bunga area (Bukit Bunga/Jeli Conurbation Development Project)	other relevant state and federal agency	
<u>Activities</u>	- Planning & Development at Kelantan-Thailand Border Areas by ECERDC	
Briefing and presentation by;	2. Question and Answer session	
1. ICQS official on border security and customs matters	9.30 – 10.45am	
2. UPEN Kelantan/ECERDC/ Bukit Bunga Local Authority	Meet with Kelantan State Government Agencies	
- Briefing on local plan	10.45 – 12.00pm	
3. Question and Answer session	Meet with Kelantan Chamber of Commerce and logistics operators.	
UPEN Kelantan/ECERDC to provide detail of activities	12.00 – 1.30pm	
2.00 – 3.00 pm	Move to Lunch venue for lunch.	
Move from Bukit Bunga, Kelantan to Rantau Panjang ICQS, Kelantan	1.30 – 2.00 pm	
3.00 – 4.00 pm	Move from Kota Bharu to Pengkalan Kubur	
Visit Rantau Panjang ICQS, Kelantan	2.00 – 3.30 pm.	
Meet Custom, Immigration and local Authorities in Rantau Panjang	Visit Pengkalan Kubur (Kelantan State),	
Briefing and presentation by;	Meet Custom, Immigration and local Authorities	
1. ICQS Rantau Panjang	<u>Activities</u>	
2. UPEN Kelantan/ECERDC/ Rantau Panjang Local Authority	Briefing and presentation by;	
- Briefing on local plan	1. ICQS official on border security and customs matters	
3. Question and Answer session	2. UPEN Kelantan/ECERDC/ Pengkalan Kubor Local Authority	
<i>Visit to site of the second bridge link at Sungai Golok – Rantau Panjang</i>	- Briefing on local plan	
4.30-4.45pm	3. Question and Answer session	
Move from Rantau Panjang ICQS to Pasir Mas Halal Park	3.30 – 4.00 pm	
4.45– 5.30 pm	Move from Pengkalan Kubur to Tumpat, Kelantan	
Visit to Pasir Mas Halal Park and other significant projects in ECERDC area	4.00 – 5.00 pm	
5.30 pm – Move to Kota Bharu and check-in hotel in Kota Bharu.	Visit to relevant economic activities around Tumpat area as well as bridge link at Pengkalan Kubor – Takbai land link network in Malaysia connected with Pengkalan Kubor – Takbai bridge	
	5.00 pm –	
	Back to Hotel in Kota Bharu, Kelantan	



**Figure B.3: NESDB Fieldtrip Agenda, 16-24 February 2014**

<b>16 February 2014 (Sunday)</b>	
09.50-11.20	Thailand Delegation / ADB / Consultant arrive at Hat Yai Airport, Songkhla Province
16.30-18.00	Visit Border Market (both at Wang Prachan CIQ and Wang Kelian sides)
<b>17 February 2014 (Monday)</b>	
10.00-12.00	Possibly visit to relevant economic activities in Satun Province
14.00-15.30	Visit Wang Prachan CIQ, Satun Province, Thailand
16.30-17.30	Visit Wang Kelian Check Point, Perlis State, Malaysia
<b>18 February 2014 (Tuesday)</b>	
07.00-08.30	Discussion with Relevant agencies at Padang Besar CIQ, Thailand side
10.30-11.00	Cross border to Padang Besar ICQS, Perlis State, Malaysia
11.00-12.30	Visit Padang Besar ICQS Perlis State, Malaysia
13.30-14.30	Move to Bukit KayuHitam ICQS, Kedah State, Malaysia
14.30-15.30	Spend a short visit to new location of Bukit KayuHitam ICQS
16.00-17.00	Discussion with relevant agencies on Thailand side including relevant agencies from
<b>19 February 2014 (Wednesday)</b>	
08.30-10.30	Visit Ban Prakob CIQ, Songkhla Province, Thailand
10.30-11.00	Cross border to Durian Burong ICQS, Kedah State, Malaysia
11.00-12.30	Visit Durian Burong ICQS, Kedah State, Malaysia
14.30-15.30	Visit Chalung Industrial Park discussion with IEAT on rubber city project
<b>20 February 2014 (Thursday)</b>	
14.00-15.30	Short discussion with relevant agencies on Malaysia side
16.00-17.00	Cross border to Betong CIQ, Thailand
16.00-17.00	Move to Betong District, Yala Province, Thailand
<b>21 February 2014 (Friday)</b>	
08.30-12.00	Visit Betong CIQ, Betong District, Yala Province, Thailand
16.00-17.00	Short discussion and visit to economic areas at RantauPanjang ICQS as suggested by EPU
16.30-17.00	Cross border to Sungai Golok CIQ, Narathiwat Province, Thailand
<b>22 February 2014 (Saturday)</b>	
07.30-09.00	Move to Buketa CIQ, Waeng District, Narathawat Province, Thailand
09.00-12.00	Visit Buketa CIQ, Waeng District, Narathiwat Province, Thailand
12.30-14.00	Visit Bukit Bunga ICQS, Kelantan State, Malaysia
14.00-15.30	Move to RantauPanjang ICQS, Kelantan State, Malaysia
15.30-16.00	Cross border to Sungai Golok CIQ
15.00-18.00	Visit Sungai Golok CIQ, Sungai Golok District, Narathiwat Province, Thailand
<b>23 February 2014 (Sunday)</b>	
09.00-11.30	Discussion with relevant agencies on Thailand side
12.30-14.00	Visit to potential development areas in PengkalanKubor ICQS, Kelantan State, Malaysia
16.00-17.00	Move to PengkalanKubor ICQS
17.00-18.00	Cross border to Tak Bai CIQ via ferry






## ANNEX C. LIST OF PERSONS MET



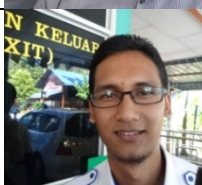



Photo	Name	Title	Organization	Email	Mobile
<b>Satun</b>					
	Mr. Witthachai Arun-aramsak	Chairman of the Satun Chamber of Commerce	Satun Chamber of Commerce	<a href="mailto:satunpcc@gmail.com">satunpcc@gmail.com</a>	081 897 6621
	Mr. Somchai Tonsrisakul	Member of Satun Chamber of Commerce	Satun Chamber of Commerce	<a href="mailto:satunpcc@gmail.com">satunpcc@gmail.com</a> <a href="mailto:somchai_goit@hotmail.com">somchai_goit@hotmail.com</a>	081 896 5911, 081 839 2999
<b>Padang Besar</b>					
	Mr. Chitchai Mongkonganchong	Chief of Customs Control and Audit Sub Division	Padang Besar Customs House		081 623 1686
	Mr. Thaweesak Woradilok	Chief of Customs Services II Sub Division	Padang Besar Customs House		081 910 0070
	Mr. Thawatchai Boonsiri	Chief of Custom Service I Sub Division	Padang Besar Customs House		081 667 2989
	Mr. Saksith Yuttaprasert		Padang Besar Customs House		085 041 3332
<b>Sadao/(Songkhla)</b>					








	Mr. Pongpachara Phansook	Sadao Customs	Sadao Customs House		081 647 3509
	Mr. Ammard Waemamu	Sadao Customs	Sadao Customs House		081 897 8067
	Mr. Viboon Nantasanti	Sadao Customs	Sadao Customs House		081 875 4392
	Ms. Porndhan Ponasuwan	Secretary of Sadao Customs House	Sadao Customs House		081 649 2399
Ban Prakob (Songkhla)					
	Mr. Amarit Sawatdikul	Chief of Ban Prakob Customs House	Ban Prakob Customs House		02 667 7000 ext. 244900
	Mr. Arun Dechpreechakul	Chief of General Administrative Sub Division	Ban Prakob Customs House		02 667 7000 ext. 244900
	Mr. Sumeth Rojanashevinsu porn	Chief of Customs Control and Inspection Sub Division	Ban Prakob Customs House		02 667 7000 ext. 244900
	Mr. Suji Lertkrai	Chief of Investigation and Suppression Sub Division	Ban Prakob Customs House		02 667 7000 ext. 244900
Southern Industrial Estate					

	Ms.Kangsadarn Pongsawat	Director of Southern Region Industrial Estate		Kangsadarn.p@ie at. mail.go.th	081 812 0156
<b>Betong (Yala)</b>					
	Mr Samphan Jarurattananont	Chief of Betong Custom	Betong Customs House	samp99911@gmail.com	084 821 0432
	Mr. Pichai Phuyuthanon	Customs	Betong Customs House		081 898 7197
	Mr. Ananthawong Ketusorn	Customs	Betong Customs House		073 231 194
	Mr. Phitzanuwat Santikunakul	Customs	Betong Customs House		073 231 194
	Ms ChonChat Ponrak	Secretary to Betong Mayor	<b>Betong Municipal</b>		<b>095 865 4956</b>



	Mr. Rakkiet Rungrat	Policy and Planning Officer	<b>Betong Municipal</b>		083 984 1468
<b>(Narathiwat)</b>					
	Mr. Nattapong Sirichana	Governor of Narathiwat	Narathiwat Provincial	<a href="mailto:narathiwat@moi.go.th">narathiwat@moi.go.th</a>	089 203 0433
	Mr. Eakasak Arayanan	Provincial Commercial	Narathiwat Provincial Commercial Dept.	<a href="mailto:nr_ops@mao.go.th">nr_ops@mao.go.th</a>	073 511 098
	Ms. Benjathip	Secretary to the Governor		<a href="mailto:narathiwat@moi.go.th">narathiwat@moi.go.th</a>	080 705 1155 073 642 737 ext. 76029
<b>Wang Kallian (Perlis State)</b>					
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	Mr. Ahmad Fikri Bin Mistar	Forestry Manager of State Park	Forestry	<a href="mailto:fikri@forestry.gov.my">fikri@forestry.gov.my</a>	013 666 2173
	Mr. Mahazan Bin Mahathir	Assistant Director	Malaysian Public Works Department (JKR)	<a href="mailto:mahazanM@jkr.gov.my">mahazanM@jkr.gov.my</a>	016 557 7453
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<b>Padang Besar (Perlis State)</b>					
	Mohd Muhaimin Bin Mohd Zin	Customs Officer	Royal Malaysia Customs Department (Padang Besar, Perlis)		019- 2777572
	Ahmad Shahidan Said	General Manager	PMC	<a href="mailto:Emenea1@yahoo.co.uk">Emenea1@yahoo.co.uk</a>	+6012 201 2543

	Zamri Ismail	Assistant Administrative Officer	State Economic Development Corporation Halal Park	<a href="mailto:zamri.ismail@penps.gov.my">zamri.ismail@penps.gov.my</a>	012-4944570
	Wan Ahmad Marwan Bin Yaacob	Clerk(P/O)	State Economic Development Corporation Halal Park	<a href="mailto:marwan@penps.gov.my">marwan@penps.gov.my</a>	
	Asyraf Affendi Bin Ahmad	Assistant Administrative Officer	State Economic Development Corporation Halal Park	<a href="mailto:asyrafaffendi@penps.gov.my">asyrafaffendi@penps.gov.my</a>	
<b>Bukit Kayu Hitam (Kedah State)</b>					
	Dato Ahmad Shukri Tajuddin	Chief Executive officer	Senai High Tech Park	<a href="mailto:shukri@senaipark.com">shukri@senaipark.com</a>	+603 2692 1700
	Faridatul Hana Subry	Senior Executive	Northern Corridor Implementation Authority	<a href="mailto:faridatul@ncra.com.my">faridatul@ncra.com.my</a>	+(6012) 687 7337
	Marvin Lee Hsien-Hoong	General Manager	MMC	<a href="mailto:marvin@mmc.com.my">marvin@mmc.com.my</a>	+603 2071 1218
	ABD Rahim Bin Mahmood	Immigration Officer	Jabatan Imigresen Malaysia	abdrahim_mahmood@imi.gov.my	017 500 6157

	Afizar	Customs Officer	Bukit Kayu Hitam Customs		Tel:04-221621 Fax:04-221217
	Mohamad	Customs Officer	Bukit Kayu Hitam Customs		Tel:04-221621 Fax:04-221217
<b>Durian Burung/from Kuala Nerang (Kedah)</b>					
	Amri	Immigration Officer	Durian Burung Immigration		Tel:04779 3311 Fax:04 779 333
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